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BALTIMORE, NOVEMBER 4, 1909.

AN ENGLISH CAPITALIST FINDS THAT THE SOUTH IS NOT LAZY.

In view of recent sensational accentuations of the long-maintained slander that the people of the South are lazy, the intelligence of the country will read with interest the statements in an interview with the Birmingham correspondent of the MANUFACTURERS' RECORD of Mr. Cecil Grenfell, representing the English Rothschilds, who have made large investments in the South. Mr. Grenfell says:

I had formed an idea that you had plenty of cotton and were a kind of lazy, go-easy people, with not much energy. This trip has been a regular eye-opener to me and others of the party who have not visited your section before. I have visited California and Canada, but have never seen anything to equal the great development that is going on in the South.

BONDS FOR WATERWAYS.

In the past ten days the presence of President Taft at the annual convention of the Inland Interstate Waterway Association at Corpus Christi and at the convention of the Lakes-to-the-Gulf Waterway Convention at New Orleans has focussed the attention of the country upon the question of the improvement of the waterways of the country. The special interest thus aroused is likely to be maintained by the convention at Jacksonville, Fla., November 16 of the Mississippi-to-Atlantic Inland Waterway Association and the meeting at the end of the same week at Norfolk of the Atlantic Deeper Waterways Association, carrying the enthusiasts close to the

big meeting at Washington in December of the National Rivers and Harbors Congress. The meetings at Corpus Christi, at New Orleans, at Jacksonville and at Norfolk, while trenching, of course, upon the proposition of general benefits to the country from waterways improvement, really turn upon special projects, parts of the big, broad plan that must be carried out if the best results are to be had. The Washington meeting is of the organization which does not concern itself with the aspirations of particular localities or with special undertakings, but is assiduous in the cultivation of a reasonable, widespread and deep-seated public opinion that may induce the Congress of the United States to provide the means for comprehensive and prompt treatment of all waterways susceptible to improvement for transportation uses. The Rivers and Harbors Congress has already gone on record as favoring a large bond issue in preference to comparatively small appropriations to pay for tinkering waterways. The two conventions already held kept the bond issue to the front, and it should be kept there until the country is assured that adequate provision has been made for the accomplishment of a task that may well utilize much of the energy and much of the financial power of the American people.

Into the gathering at Washington no local or special project should be allowed to intrude. Conventions for definite purposes are all right, and in their practical intent should be supported by the people of the sections to be benefited by them, but the point to be emphasized at Washington is that all the navigable waterways of the country should have all the improvement that they can take and that the most business-like and just means for insuring such a result is the Federal bond issue.

GOOD-ROADS PHOTOGRAPHY.

The public roads office of the National Department of Agriculture is preparing to send an engineer and a photographer through the South for the purpose of securing illustrated data of the present status of road building and road maintenance in that section. We are glad that the Department has been saved much labor by the publication in our issue of October 28 of official data on this subject from more than 500 counties in the fourteen Southern States, Oklahoma and Missouri. Photographic work of the kind contemplated ought to supplement our Good-Roads Issue and further the splendid work which Southern communities are doing in highway improvement. It is hoped, however, that the photographic visitation will not tend to divert State and county energies in the South to the propaganda for financial participation of the Federal Government in State good-roads work. Such participation would undoubtedly damage the good-roads cause.

INOCULATING THE SOUTH WITH THE HOOKWORM OF MENDICANCY.

If the white people of the South wish their progeny to escape the danger of becoming parasites deserving the contempt of self-respecting intelligence, they should lose no time in combating the hookworm of mendicancy with which they themselves are being inoculated.

Fit complement to the \$52,000,000 endowment of his Educational Trust is John D. Rockefeller's \$1,000,000 Hookworm Benefaction. When certain impulsive Southerners have cooled off from their enthusiasm over a million dollars that superficially justifies the essentially vulgar assumption in the hookworm letter that the Southern people are willing to accept alms in return for hospitality, they may be able to perceive the intimate relation between a persistent hookworm sensation maintained for many months in "popular" literature primed from New York and the latest bit of "philanthropy" from that quarter on behalf of the South. This propaganda, hung upon scientific facts long recognized but no real basis for undue excitement, has misled the country and created a false impression as to the health conditions in the South. It is on a par with much of the far-reaching work done in misrepresenting the South from every point of view, making it appear a land of beggars first and now a land of disease. If the South will study the matter, its perception may expand into a realization of the fact that the success of divers "philanthropies," with headquarters in New York and more or less closely allied in personnel and in pocket, can mean only the degradation of the South and the consequent destruction of the integrity of the American people.

These "philanthropies," with just enough of the shadow of truth in their pretexts to beguile earnest, kind-hearted, honest, and so, unwary, men and women, have emerged in the following order:

For the elimination of "child labor" from Southern cotton mills, by absolutely misrepresenting the conditions and for the purpose of delaying Southern industrial progress.

For universal education in the South, including "like training for blacks and whites," for the purpose of advancing the negroes at the expense of the whites.

For immigration of foreigners alien in origin and in instincts to all that has made America what it is, with the intention of dumping New York's congested foreign population upon the South.

For the eradication of the hookworm from Southern soil and the Southern people, when the real problem is that of permitting the South to work out upon a basis of self-respect and self-reliance its policy for furnishing to hundreds of thousands of the poorer class of whites steady, well-paid employment, so that the effects of a century of mental and physical semi-starvation because of lack of work may be overcome.

More than a hundred million dollars represents the capitalization of these enterprises, distinctly hostile to every influence that has made for good in American institutions, but a trifle compared with the results that their success would bring to their promotion.

This vast endowment for the debauchery of the people of the South is an unmerited gratuitous insult to the untainted intelligence of that section, and it is not mitigated in the least degree by the fact that through salaries, pensions and honors of various kinds some natives of the South have been induced to blind themselves to impending catastrophe, and even many others directly concerned in the movements do not realize what the outcome may be.

The population of the United States, numbering 31,000,000, in 1860 had wealth aggregating \$16,000,000,000. The population of the South today, 27,000,000, or 4,000,000 less than the total population of the country in 1860, has wealth aggregating \$22,000,000,000, or \$6,000,000,000 more than the total wealth of the country in 1860. With such wealth and with its equipment in things material the South ought to make it impossible for any witting beggar, whether president or professor of a university or college, declasser clergymen, public official, or any other being, white or black, to find comfort save in the purileous congenial to human shame. It should close and bar the door of anything that by the most violent strain of the imagination can possibly be mistaken for hospitality against any influence that tempts it to intellectual and moral pauperism.

Non-resistance to the emasculating proffers that have been made to it during the past decade means that all the material prosperity that may be evolved from its magnificent natural resources will be a curse that any upright folk would avoid as they would avoid the easy path to Hell. Non-resistance is a sure promise that the Southern white people will ultimately be deprived even of the material results of the development of their natural resources.

Compulsory school attendance, in its origin a means of furthering the "child-labor" agitation by false pretense, worked out to its extreme intent, will deprive hundreds of thousands of whites of the opportunity of becoming trained to follow their parents' footsteps in paths of industry and independence; it will reduce the equipment of operatives in Southern cotton mills to a point where negro operatives will have to be substituted and, consequently, where all the whites will be driven from the employment which during the past quarter of a century has been one of the most potent agencies in bettering the condition of a vast army of Southern whites.

Reinforcement by Southern whites, at the sacrifice of their own legitimate interests, of educational and economic energies directed from other parts of the

country for the purpose of making the South the most attractive place in the world for negroes is the best device that could be imagined to prevent the proper solution of the negro problem by scattering the negroes through the country, the best device to keep the negroes from becoming next-door neighbors of negrophile "philanthropists," the best device to hobble Southern progress.

Seducing the South into supporting schemes to keep the negroes massed there is an effective means, when supplemented by sensational publications in the North and West, of checking the natural instinct of thrifty men in other parts of the country, whether native-born or coming from portions of Europe where Caucasian elements dominate, to move to the portion of the country where nature offers the greatest returns for human enterprise and industry. But as a means of checking desirable immigration and, consequently, easing down the South to becoming a party to the scheme to dump upon the South the undesirables of great cities in the North and their ever-increasing hordes of newcomers, it cannot touch the effect of the false impressions about the South and its people, created by the \$1,000,000 ahus for the "eradication of hookworms."

If the schemes here briefly mentioned are permitted to work out to their logical conclusion in a division of Southern whites about secondary matters, however "moral," injected into their politics under the financial management of the schemers, the remnant of the upright South will be in a far worse plight than were the whites there in reconstruction days, and they will be absolutely helpless to block plans to validate, through the legislation of a horde of mongrels co-operating with debauched whites, the evidences held in other parts of the country of justly repudiated attempts at robbery in the carnival of crime in the '70s. Upright whites will be obliged then to sacrifice the results of two generations of a struggle against adverse circumstances that has aroused the admiration of informed intelligence everywhere and to find refuge in alien lands. The remaining whites of the South will be hookworms prompt to fasten upon any provender, however debased.

The South is confronted by the greatest danger to its welfare and happiness that has ever assailed any respectable people. The million-dollar Hookworm Benefaction should be repudiated as promptly as were the benefactions of the visiting "philanthropists" of 1865-1876. The two repudiations would touch the same individuals in some cases.

The hookworms that the South should eradicate from itself are those that would hook it to degradation.

SELF-PROPELLED CARS SUCCEEDING.

Gasoline motor cars for railroad service are making headway now in the Eastern and Southern States, as well as in the West. Both the Pennsylvania and the Norfolk & Southern Railroad companies have placed orders for different types of these vehicles, and the results of their operation will be awaited and observed with interest by other transportation corporations which are contemplating their use. Moreover, the Southern Railway has ordered two gas-electric motor cars, after some experience in testing them, so that the adoption of self-propelled cars for certain classes of railway service on systems generally using steam locomotives appears destined to extend.

It was not more than five years ago when the efforts of mechanical engineers to design for railroad service a satisfactory type of gasoline motor began to meet with success. About the same time engineering skill was also directed toward developing a gasoline and electric motor for the same service, as well as to produce new types of steam motor cars, which, by the way, have long been known to railroad men. Each of these three patterns of self-propelled cars found favor, and railroad practice today shows all of them in service somewhere. In this country there are probably more of the gasoline cars in use than any other sort, but that may be owing to the fact that a prominent railroad system with thousands of miles of line, including much suitable for such vehicles, became interested in the development of a unique pattern, for the manufacture of which a separate company was finally organized, and which is now engaged in filling many orders for its products. Other and lighter types of gasoline cars are being built elsewhere and are finding favor with companies whose operating environment demands vehicles of about the same size as street-railway cars. Then the gas-electric car, also for light or heavy service, has its staunch admirers, and the fact that those who

build it are securing orders in the face of active competition is testimony to its merits. But of steam motor cars we have comparatively few in the United States, although their numbers may increase later on. At present, however, it does not appear determined which, if either, of the several types of self-propelled cars is to outlive the others. All are successful in operation, and vigorous, enterprising men are urging their respective merits in the transportation world.

But now a new idea apparently has come into the field. According to a press dispatch, motor cars with rubber wheels are to be operated experimentally at Enid, Okla., on a track especially built for them and consisting of cement rails laid on cement ties. What is to be the result of this novelty in transportation, if the report be true?

GRIEVANCE OF THE "SOUTHERN COMMERCIAL CONGRESS" AGAINST THE MANUFACTURERS' RECORD.

Three individuals, styling themselves the Committee of Arrangements of the "Southern Commercial Congress," have, in the impertinence based upon ignorance that has characterized so much of that aggregation, taken it upon themselves to inform editors of Southern newspapers that they are of the opinion that the editorial columns of the MANUFACTURERS' RECORD "are not as true to Southern needs as are its news columns." Nothing has developed explaining why these brilliant discoverers of the South could have possibly imagined that the editors of Southern newspapers could be interested in any opinion that they may have on any subject. One of the Southern editors, sending us the effusion in which the absurd statement is made, writes:

How about the above? What grievance have they?

The grievance is, to the best of our knowledge and belief, that the MANUFACTURERS' RECORD, fully aware of the emptiness of the pretensions of the "Southern Commercial Congress," and

knowing that there was absolutely nothing Southern about its needs, has prevented the South from becoming a party to a real-estate deal in Washington promoted under pretense of advertising the resources of the South. We had no criticism of any enterprise seeking to market a piece of real estate long in disuse, although in a most desirable location; we welcomed any business-like plan to add a handsome building to the many structures that adorn the Capital of the Nation. But, acquainted with its origins and with the history of fifteen or twenty years behind it, we knew that the "Southern Commercial Congress" plan could be only a drawback upon Southern development. Proof of that was immediately forthcoming in the attempt to persuade each of one thousand successful men of the South to make effective the real-estate deal in Washington by sending for deposit to the credit of an unincorporated undertaking a draft for \$250 and three promissory notes aggregating \$750 for the endowment of the "Southern Architectural Monument" at Washington, in the amended plan of seeking to induce Southern interests to take stock in a company formed to finance the building and in the invitation to Southern commercial organizations to contribute cash to meet the "expenses" of the "Congress."

Commercial bodies that are worth anything to their communities have no money to spare for outside enterprises, no matter how intrinsically meritorious they may be, and especially for enterprises of the balloon-like character of the "Southern Architectural Monument." Their own communities offer the best opportunities in the world for all the financial power at their disposal. Active participation by their secretaries in all sorts of inchoate and practically aimless conventions, convocations, conferences, parliaments and congresses suggests that such officials have not the local situation fairly in hand, and are enjoying unnecessary leisure. Right to this point is the following from a letter of Mr. O. P. Thomas, secretary of the Twenty-Five Thousand Club of Abilene, Texas:

I have noted with interest what you say about the Southern Commercial Congress and am rather inclined to agree with the view you take in the matter. The greatest handicap we have in commercial club work is the fact that we have so many hot-air propositions hooked up on a "castles-in-the-air" basis and their various and sundry meetings, which, if attended by a commercial club secretary, would take all of his time from his home town.

Business men this day and time who are contributing to the support of commercial clubs expect results right at home just as they do from any other investment, and while it is my opinion that an occasional meeting of representatives of commercial bodies to exchange ideas and compare notes is a good thing, yet the average commercial club secretary who is really making good and accomplishing anything of consequence for his town is the man who is working industriously in and around the immediate domain of his organization. I had rather have the \$25 it takes for membership in the Southern Congress spent in classified ads. in reputable publications, and believe that it stands to do a hundred times the good, let alone the saving of time and expense of a representative sent to these congress meetings.

The circular-letter of the "Southern Commercial Congress" incloses a news note regarding "The Commercial Possibilities of Shallow Streams." The note does not contain a hint of the real news in this connection. It is to the effect that the streams in the South to which the "Southern Commercial Congress" went a-fishing were found to be so shallow that they

contained practically no commercial possibilities for the "Congress." The fish that usually bite, or, rather, gulp, any bait thrown at them were few and far between. There was a widespread drought, and the MANUFACTURERS' RECORD was responsible for it. That is the grievance of the "Southern Commercial Congress" against us. In that we rejoice with exceeding great joy.

THE SOUTH IN LECTURES.

An interesting sidelight upon the interest in the South felt in other parts of the country is given in a letter to the MANUFACTURERS' RECORD from Mr. F. G. Gilman of the Barringer High School, Newark, N. J. As a part of the educational work in that city the Board of Education has a course of free public lectures. The course is to include lectures illustrated with lantern slides on the industrial development of the South. No more fertile field for material for interesting public lectures exists. The advance made by the South during the past quarter of a century in agricultural, manufacturing and mining industries is one of the most dramatic romances of American history. It is full of suggestions for alert minds, and the lessons of it properly applied can result only in an advance for the South eclipsing all that has gone before. We have often wondered why the great lecture bureaus have not made more of the South in their courses for popular entertainment and, though some of the great railroad systems operating in the South have, in their campaigns for immigration, found lecture trains and exhibits of Southern products valuable agencies, we believe that, in this day of moving pictures and beautifully colored lantern slides, lectures of a popular character covering the regions served by them would be even more telling as effective agencies in attracting to the South the most desirable kind of settlers.

The Newark letter suggests an important question. How many cities in the South itself are being vitally interested in the development of their section by means of illustrated lectures, and how many schools in the South have anything of the kind included in their curricula? There is not a single one of the fourteen Southern States which does not contain material for an inspiring and entertaining series of lectures, not one without vast material for the lantern slides. The rising generation, hearing lectures of the kind, could not fail to be impressed with the possibilities of their section and to become more active personally than even their fathers, who have wrought so mightily in the task of getting most advantage from the possibilities.

HYPNOTIZED BY TYPE.

Why will daily newspapers published in the heart of the cotton-growing section of the world, the South, print the alleged news, given out as of foreign origin, at the beginning of every cotton year and designed to depress the price of cotton, as, for instance, the cablegram from Berlin last week to the effect that a German spinning company had successfully spun the fiber contained in the seeds of the kapok, or silk cotton tree of the tropics?

President S. E. Mezes of the University of Texas writes to the MANUFACTURERS' RECORD.

Your publication comes to our library regularly. You are most helpful toward the upbuilding of the South.

INCREASING HOME CONSUMPTION OF SOUTHERN PIG-IRON.

The building by the Southern Iron & Steel Co. of its new steel mill and rod and wire plant at Gadsden, of which illustrations were given in the *MANUFACTURERS' RECORD* last week, and the rapid expansion of the steelmaking plant of the Tennessee Coal, Iron & Railroad Co. at Ensley, are very important steps in the utilization of the pig-iron produced in the South in the development of diversified industries for consuming pig-iron. At the present time too large a proportion of the iron made in this section is compelled to find a market in the North and West. It goes from the South as far North as Canada and as far West as Seattle, and much of it returns to this section in the shape of cars and locomotives, textile and woodworking machinery, engines and other finished goods. The dream of the progressive men of the South has been to save this double freightage and to develop industrial interests in this section to the point where the iron made in the South will be turned into the finished product here, thus giving the benefit in the employment of labor and the added wealth that comes through the fullest utilization of all of its resources. At present the South is a dominant factor in the production of foundry iron, and the Birmingham market practically sets the price for foundry iron throughout the United States. The increasing home consumption of Southern iron which will take place with the completion of the steel plant at Gadsden and the enlargement of the Ensley plant will to a large extent eliminate two leading concerns from the market as producers of foundry iron, since the bulk of their product, instead of going on the open market, will be turned into steel, unless, perchance, they should decide to build new furnaces in order to meet this condition. That, however, would be a matter for future consideration. It looks now as though for the next year or two at least the amount of Southern-made iron available for the open market will be much less than heretofore, notwithstanding the increased production, and notwithstanding the very great increase in the consumptive requirements of buyers of Southern iron, both in the South and elsewhere.

The iron trade of the South has not kept pace with the iron trade of the country, nor has it kept pace with the general industrial development of the South. For reasons that are understood by all who have studied the matter, the building of furnaces in this section has made less progress than in the North and West. In the latter sections there has been a home demand for the output of furnaces and steel works. In the South, on the contrary, the home demand has not been equal to the output, and Southern iron has had to bear the burden of finding a market in the North and West, paying a freight rate of \$3 or \$4 a ton. Conditions are now changing. There is a rapid increase in the consumption of Southern iron by Southern foundries and machine shops. This must inevitably go on still more rapidly. Added to this growth of the home market will be the consumption in steel works of a large portion of the output of two companies which have heretofore been heavy purchasers of foundry iron for the open market. It is quite probable that progress in this direction will be further hastened by the development of other plants by other iron companies for turning their pig-iron into the finished products. At last, after

many years of what might be called experimental work, the exact duplicate of what the Pennsylvania iron industry went through in the early stages of its development, the South is now on the right road for a broad expansion of its iron and steel making. The investment of many millions in this section by the Steel Corporation has given much confidence to investors throughout this and other lands as to the wealth to be created in the South through the utilization of its raw materials, and following this the large investment made in the Southern Iron & Steel Co. by leading New York financiers and by the greatest banking-house in Europe, if general reports are to be accepted as correct, will give additional impetus to this fundamental industry. Nature has given to the South such peculiar advantages that while it can invade other markets with its iron, though it has to pay a heavy freight and lessen the profit thereby, producers in other sections cannot enter the Southern market, since their cost of production does not make this possible. Thus every mile of railroad built in the South, every new wheel that turns on rail or in factory, every step of progress made is strengthening the South's iron position and enhancing the strategic value of its coal and iron and making more certain their utilization and more certain profits commensurate with those made in these industries in other sections.

CHARLOTTE.

A splendid exposition of Charlotte and its environs is made in the eighth edition of "Sketches of Charlotte," by Mr. Wade H. Harris, editor of the *Evening Chronicle* of that city. With its many half-tone illustrations, maps and diagrams it is an artistic success in presenting in pleasing diction a mass of information valuable to the homeseeker and prospective investor in commercial, manufacturing or farming enterprises. One illustration shows Charlotte in the center of a circle within the 100-mile radius of which are 425 cotton mills operating 5,511,543 spindles, 120,000 looms and 4000 knitting machines, a typical suggestion of Charlotte's present and future greatness.

SPARTANBURG CELEBRATES.

To celebrate the opening to that city of traffic on the Carolina, Clinchfield & Ohio Railway, Spartanburg, S. C., gave last Saturday to 1200 guests a barbecue, at which Dr. H. N. Snyder, president of Wofford College; Vice-President A. A. Phleger of the new railroad, Mayor R. G. Rhett of Charleston, J. W. Pless, for the Mayor of Marion, N. C.; Mayor Reamer of Columbia, Mayor John D. Marshall of Greenville and others made addresses dwelling upon the importance of the new railroad to the Piedmont South.

THE COTTON MOVEMENT.

In his report for October 29 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 59 days of the present season was 3,754,929 bales, an increase of 201,673 over the same period last year. The exports were 1,871,168 bales, an increase of 261,902 bales. The takings were, by Northern spinners, 339,889 bales, a decrease of 129,837 bales; by Southern spinners, 427,632 bales, an increase of 26,816 bales.

CORRECTION.

In correspondence from Abilene, Tex., in our issue of October 21 the statement was made that cars shipped in and out in 1890 numbered 366. The number should have been 3660.

SOUTHERN RESENTMENT AT THE HOOKWORM SCARE.

In many quarters of the South indications are increasing that the superfluous hookworm benefaction, announced last week, is having an effect exactly contrary to one that might have been expected in some quarters. It is bringing forth expressions of self-respect and self-reliance that the South has needed for some time in opposition to the wholesale "philanthropy" which has been urged upon the South since the turn of the century. From the outset the *MANUFACTURERS' RECORD* combatted the philanthropy, and has maintained for nearly ten years with all its vigor the fight against its various guises. It is glad to record in the following columns the evidences that its belief that the South would awaken to the menace was well founded.

SELF-FED MENDICANCY.

[Anderson (S. C.) Mail.]

Once more the South is called on to give thanks for the alms of the rich.

Mr. John D. Rockefeller has given a million dollars, which is to be used in fighting the hookworm disease in the south. The newspapers are full of praise for him.

The hookworm disease may be a serious matter, and it ought to be combatted, of course. But it ought to be done by the people of the South themselves. We are sorry to see this section so pauperized before the world by Mr. Rockefeller's gift.

This gift will make the South appear before the rest of the country and before the world as a poverty-stricken country, the land of diseased people who are too poor to doctor their own ills. A rich man of the North will be praised to the skies for having given of his wealth to alleviate the distress and suffering in the South. The South will suffer through the deification of Dives, and we doubt if any real, substantial good will be done.

The physicians employed by the Federal and State governments are qualified to cope with any situation that exists or may exist in the South. There is in Mr. Rockefeller's city of New York more disease and more suffering than there is in all the South. It is a pity he does not give more attention to the people who need it most.

We are getting tired of these gifts of the rich people to the South. The intention may be good, but we do not admire it. The only effect in the South, if any, is to take away the independence and initiative of the Southern people, and make them not only willing to accept these gifts, but actually expect them and ask for them.

We wish Mr. Rockefeller had used his money to some other purpose. He is attempting at best to do a work that is now being done by the people themselves, and which ought to be done by them and by nobody else.

And we confess to a feeling of surprise and disgust when an official of this State sops over in his praise of Mr. Rockefeller for his gift of money to fight the hookworm and actually suggests another gift from him for the purpose of fighting other diseases!

Indeed, the demoralizing effects of the gifts of Dives are beginning to be apparent. Having accepted charity, we naturally ask for more.

NO THANKS.

[Charlotte Observer.]

Toward Mr. John D. Rockefeller's gift of \$1,000,000 to fight hookworm ravages in the South we have no ungracious words. It may be well meant, and it will doubtless do some good. But thanks to Mr. Rockefeller are quite another matter. If our request or acceptance had been necessary the gift would never have been made.

The United States Government has its health service, one of whose scientists, indeed, discovered the hookworm. Similarly there are health officers in the State, county and town throughout the country. If these organized forces in public employment need more men and more money to cope with hookworm or any other disease—and hookworm disease is peculiarly a mat-

ter for public concern—let the grant be made. The United States Government is not poor, nor do Southern State governments lack money for such purposes. Much better would the people depend upon payments from their own taxes for health and strength than upon any individual multi-millionaire's pocket.

And there is something more to be said. Mr. Rockefeller heads a compact power which aims at nothing less than governing the United States in its own interest, and even now very nearly does so. This power is not for one generation only, but will be transmitted entire. Apart from the question of taint upon his almost inconceivable wealth, we must consider that wealth's potentialities. Mr. Rockefeller, with \$30,000,000 already given or set aside, is in a splendid way to take over the South. At the present rate there will soon be very few people left in this section who can decently open their mouths about him or the things he stands for except in praise.

THINGS TO BE ERADICATED.

[Tampa (Fla.) Tribune.]

Regardless of the motives prompting Mr. Rockefeller's million-dollar relief fund, the *Tribune* again asserts that the hookworm scarecrow is a matter of mere incident consequence to the South and its appalling features have been fashioned almost entirely from the imaginings of overzealous health experts and newspaper headlines.

Mr. Rockefeller's money will, of course, be spent, but it will not "save the South," for the good and sufficient reason that the South does not need that particular brand of salvation. We have thus far failed to note any evidence of the South's decline in industry, energy or intellectual force. On the contrary, we seem to be growing in every essential of citizenship. Our people, as a whole, are accomplishing more along the lines of practical achievement and they are stronger mentally than ever before. If the dreaded hookworm is using its "hook" to such fatal effect in pulling the vitality out of the Southern constitution the fact has singularly escaped the notice of the general, unscientific public. If the South is deteriorating mentally and physically at the rapid rate described by the hookwormers, it is certainly holding up remarkably well under the weakening process.

It is probably true that the hookworm disease is manifesting itself to a limited degree in some of the rural communities of the South, where little attention is paid to ordinary physical safeguards and where the protection of proper clothing and fare is denied the children of the poorer classes. That it is in no sense a widespread ailment; that it is not the grave menace asserted by the agitators, and that it has not and will not prove the undoing of Southern industry and intelligence and the destroyer of the standing of our people among the peoples of the earth or make of us a weakling and decimated race—these conclusions must be apparent to every reasonable man, and we will have no Rockefeller or his money to persuade us otherwise. That some of the Rockefeller fund may be expended with advantage in iso-

lated instances is granted; but a million to fight hookworms is like sending a dreadnought to sink a rowboat.

As the *Tribune* has previously remarked, it is about time this hookworm and pellagra combination were squelched. It has been the fate of the South to undergo similar misrepresentations a half-century back. We have outgrown such indictments, however well meant.

Just now it is vastly more important that we eradicate the hookworm liar rather than the hookworm.

And both can be accomplished with considerably less than \$1,000,000.

EVIDENCE OF WEAKNESS.

[Macon (Ga.) Telegraph.]

Seriously, the whole blooming farce is a libel on the South, calculated and intended to keep desirable immigrants from coming among us. It is a stratagem of the enemy.

It is a part of that warfare that began more than 50 years ago, but more insidious and dangerous because it comes in the guise of friendship, "bearing gifts." Away with it!

Europe has her peasant and pauper; Mexico has her peons; the cities of the North have their slums—every land and every section has its own human derelicts. That the South is any worse off than the balance of the world is the rottenest kind of rot! The truth is there is no land of greater health and vigor in the world than this Southland. It is true that the August sun is enervating for the time, and we take it comparatively easy during the heated term; we have 12 months of open weather. But during January, February and March our Yankee brothers have to house up and breathe impure air. They have nine months to our 12 for outdoor work. Their Jack Frost, the twin or assistant evil to the white plague, is worse, than our August heat.

All sections have their drawbacks and their good points. Nature has squared it off by the law of compensation. We hope that those more or less impracticable college presidents and those immature bugologists of the South who have rushed forward to embrace this hookworm propaganda will not alarm themselves too greatly and flee from our midst and into the very jaws of the greater plague of the more northern clime.

The greatest evidence of weakness, of degeneracy, in the South that we have seen is the disposition in some quarters to embrace every fad that comes with the driftwood from the North, even if it implies a reflection on our people.

HUMOR UNWORMED.

[Louisville Courier-Journal.]

That there is perhaps a double purpose in Mr. Rockefeller's rich gift to science—one of revenge and one of altruism—does not, of course, affect the value of the gift. Should the million bestowed by him upon the lazy bug hunters result in the extermination of the microbe it would be of incalculable benefit to the infected sections. The wheels of industry would whirl; would buzz, where there is now silence and shiftlessness, poverty, pessimism, discontent! The musical profanity of the plow boy would echo—would "rebound with a joyful sound"—from hill and cliff, now brooding over untilled valleys. Automobiles, plug hats and champagne and sirloin steaks would circulate freely in districts where the hickory shirt is now worn six days in the week, and where blue jeans, linsey-woolsey and cottonade now drape the nether limbs of an indigent populace!

Should this vision be fulfilled, Mr. Rockefeller would, of course, be knighted and decorated by a king or an emperor or so, as well as canonized by science.

With suitable and sincere apologies to

a poet whose fame is small and whose name escapes memory:

"And when this does eventuate, and they choose his shield and crest,
Perhaps they'll like this blazon, which we venture to suggest.

For the crest, a spiked club sable, with the motto: 'Swat 'Em Doc';
Gules, the man-who-scooped-the-jackpot, with a million in a sock."

It will be a great day for all of us, and more especially for some of us, when the hookworm lies a bleeding corpse at our feet and there stretches out before us a colorful and alluring vista, in which striving will be as refreshing as a sparkling draught, and in which achievement will be as easy as getting money in a letter.

Great will be the name of John D. Rockefeller; negligible the billions he corrupted; sublime the mission to which an all-wise Providence appointed him!

DUM-DUM DONATION.

[Atlanta (Ga.) Dispatch.]

Declaring that the gift of \$1,000,000 for the investigation and cure of the hookworm disease is an outrage on the South, a slander on this section of the country and a "dum-dum" donation, Bishop Warren A. Candler of the Southern Methodist Church made a sensational attack on John D. Rockefeller.

"It is to be hoped," said Bishop Candler, "that our people will not be taken in by Mr. Rockefeller's vermifuge fund and hookworm commission. The habit of singling out the South for all sorts of reforms, remedies and enlightenment is not for our benefit, and the too ready acceptance of these things on the part of some of our people is not to our credit.

"For some reason self-appointed philanthropists have taken it on themselves to discover and proclaim conditions in the South calculated to create further prejudices against the States and people of the South as to divert immigration and to alarm the resident population.

"A great deal of exertion has been required in the past to establish the falsity of the many slanderous charges made against the South, and this section has not yet recovered fully from them. Recently an outcry was made that the Southern people had become the victims of a deadly disease named 'pellagra,' which was charged to the use of Indian corn. The disease has been traced to Southern Europe, where it is common, and later information goes to show that it was imported in the persons of immigrants.

"But the pellagra panic having failed of the expected result, now comes a howl about the hookworm. The South is represented to be filled with a wretched brood of dirt eaters. Who that knows the South can for a moment believe this?

"It is time the Southern people began resenting this officious disposition to take care of them which certain parties are addicted to. Donations may easily, as dum-dum bullets, wound where they hit and leave a mortal poison in the hole they make after being received. We are certainly able to take care of and to cure our hookworm without Mr. Rockefeller's million-dollar dose of vermifuge."

PARASITE HUNTERS' PREY.

[Nashville American.]

Proceeding, as is his habit, upon lines of least resistance, Mr. Rockefeller has selected a "committee" under whose direction the condition of the anemic victims of the disease in the South may be studied and the malady eradicated. In his benevolent efforts to uplift suffering humanity—those 2,000,000 and odd of whom the magazine penny-a-liner wrote so sympathetically—Mr. Rockefeller is to have the help of the bug and germ and parasite hunters

attached to the Government of the United States of America at so much per. Already these Government wisecracks, these eminent and tireless enemies of bugs and germs and parasites, etc., are praising Mr. Rockefeller's generosity—under some circumstances a very commendable thing—and by such exploitation giving the South further undesirable advertising.

It is a pity that so astute a man as Mr. Rockefeller should jump at conclusions and hand out a million before knowing the exact facts. There may be persons in the South who are suffering from the hookworm; there may be some thousands of them scattered over its vast area, but take it from us, that there is less hookworm in the South than inherent no-accountness. Nor will Mr. Rockefeller's benefaction tend to cure this latter disease, or whatever one may call it. The anemic people in certain sections of the South are anemic because they will not work, because they are content to eke out an existence rather than a living. There are thousands of farmers and croppers in the South, and probably millions in all the world, who seek to earn only a bare living; a hard living. These folks are anemic, of course. There is no hookworm bothering them; rather a spirit of don't give a continental, just so they exist.

TIME TO CALL A HALT.

[Shreveport Journal.]

The press dispatches from New York this morning announce the gift of \$1,000,000 by John D. Rockefeller for the "eradication of the hookworm in the rural districts of the South."

Isn't it about time for somebody to call a halt upon this foolishness?

The South and the Southern people during the past 40 years have recovered from a shock so great, a holocaust so disastrous, that the world must realize, when it stops to think, that it could not have been accomplished by a lazy lot of loafers. The South today is making greater strides than any other section of the country. The Southern people are working out their own destiny in their own way, financially and otherwise, and they don't need any charity from John D. Rockefeller.

The statement that the South is in the grasp of the lazy-worm is an insult and the offer of Rockefeller's million is a piece of impertinence that should be instantly rebuked.

COLD FACTS.

The New York *Sun*, that knows the South, pictures the thing beautifully in an editorial discussing "The Hookworm and the Facts," as follows:

Dr. Charles Wardell Stiles has been led down to the footlights, blushing all over and literally smothered in

Perfume and flowers,

Which fell in showers.

That lightly rained from ladies' hands, or words to that effect. And this because he is the "discoverer" of the hookworm. Dr. Stiles is now in the Marine Hospital Service. He used to be a professor in the Department of Agriculture, but he put aside his early love, perhaps for a better salary, perhaps for more congenial pursuits. Maybe he wilted under the arid eye of Tama Jim and flowered in the beaming light of Wyman. At all events he is now a Marine Hospital expert, he has "discovered" the hookworm, and bouquets and nosegays, even boutonnières, hang in his hair and flatten on his bulging chest. * * * But Dr. Stiles is not as narrow as he seems. He may want the roses and the lilies and the adulation, but he has already told us that sallow and anemic children taken from the farm—the Byrd farm to a dot—and transplanted to sanitary conditions soon lose the yellow

tint and burgeon into health and cheerfulness. * * * We depend largely upon Stiles in the exploitation of Mr. Rockefeller's million-dollar fund. We look to him to show us that the poor whites of the South can be redeemed to wholesomeness without an operation—that the hookworm, so-called, will vanish with good work, good food and hygienic circumstances.

IN WISE COUNTY FIELD.

Labor and Car Shortage Interfering With Operations.

[Special Cor. Manufacturers' Record.]

Norton, Va., November 1.

Oil has been discovered on the property of the Blackwood Coal & Coke Co. at Blackwood. The flow of crude oil coming from a hillside spring is increasing daily. Samples have been sent away for analysis. The miners at this operation are using the oil in their miners' lamps.

Of the 4349 coke ovens at the principal coke plants in the Wise county field more than half are in blast. There is a scarcity of labor in the Wise county field, coupled with a car shortage on both the Norfolk & Western and Louisville & Nashville, which is interfering with the output.

The Stonegt Coal & Coke Co. is now building a 35-oven battery at its Osaka plant which, when completed, will make 400 ovens in operation at that plant.

W. Terry Bowling of Norton has secured a lease on Col. Patrick Hogan's High Knob property, about two miles from Norton and lying 4500 feet above sea-level. An artificial lake has been made on top of the mountain, and the construction of a large summer hotel will be commenced early in the spring to replace the one already there. There is plenty of wild game in this mountain preserve, and the lake will be stocked with a variety of fish. It is the intention of the parties interested to make of the High Knob one of the finest hunting and fishing preserves in the South.

F. D. VANOVER.

To Make American Ingot Iron.

The MANUFACTURERS' RECORD is advised that the American Rolling Mill Co., Middletown, O., will build a new plant, to consist of an open-hearth department, blooming mill, bar mill, jobbing mills, plate mill and additional sheet mills, all to cost about \$3,000,000. This company manufactures special grades of materials, and does not make any merchant or standard grades at all. It will build the new works largely to take care of an increasing demand for a new metal which it has produced called "American ingot iron," which is in demand because of its rust-resisting and excellent workable qualities. The company specially produces grades of materials to meet the needs of contracting manufacturers, either in the way of quality or to be enabled to reduce waste losses in making up the manufactured article. While it has not been definitely settled, it is more than probable that the new plant will be built at Middletown, adjacent to the present works.

To Irrigate 36,000 Acres.

The Colonial Land Co., 100 Washington street, Chicago, has purchased 20,000 acres of prairie rice land near Wadsworth, Tex., and will irrigate the property from a gravity canal which the company has also purchased and will extend through the tract. This company has also purchased 16,000 acres of land, with canal, pumping plant and other equipment, near Buckeye, Tex. A portion of this tract has never been cultivated in rice, and will be watered by an extension of the canal. I. H. Claggett represents the company at Bay City, Texas.

Mitchell Coke-Making Inventions for Elkhorn Field

[Special Correspondence Manufacturers' Record.]

Uniontown, Pa., November 1.

Great interest has been aroused by the announcement made through the MANUFACTURERS' RECORD that the Elkhorn coking coal fields of Eastern Kentucky are to be immediately developed by Connellsville coke makers of large experience and the

than \$1 a ton difference to eliminate from the iron the excess of phosphorous and sulphur the Connellsville coke contains above that from the Elkhorn field.

John Fulton of Johnstown, Pa., said in a report accompanying an analysis made September 24, 1909:

"The chemical properties of this coke (Elkhorn) are much superior to the standard Connellsville; it is remarkably clean coke, exceptionally low in sulphur and phosphorous."

In the Connellsville field there are today 40,000 coke ovens. Under the most favorable circumstances a profit of \$1000 an oven per annum has been secured. The magnitude of the development in the Elkhorn field may be understood when it is

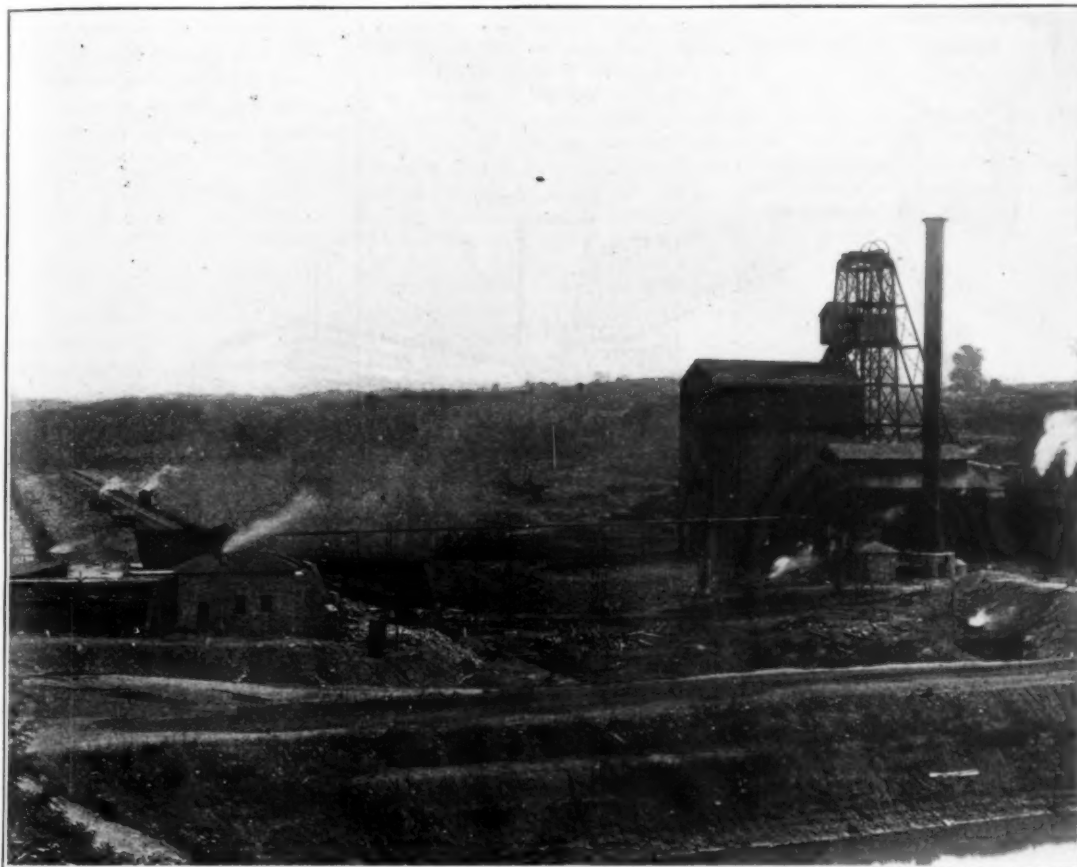
stated that the Mitchell Coke Co. proposes ultimately to build 2000 ovens, and that the acreage of coking coal owned by the interests involved will make it possible to increase the number up to 15,000 or 20,000 as the demand will justify.

Furthermore, the enormous potential increase in the wealth of Eastern Kentucky is indicated in the fact that \$3000 an acre is the standard price for coal lands in the Connellsville district. Some sales have been made at a much greater sum. The Grand Jury of Fayette county decided at a meeting recently held that the coal lands of the county poor farm, in the outskirts of Uniontown, should not be sold for less than \$6000 an acre.

The late Senator J. N. Camden of Parkersburg, W. Va., is on record as stating that the Elkhorn field, being the only field of high-grade coke and fuel coal left in the United States undeveloped, and that can be controlled, is the most valuable coal district in the United States, and consequently in the world.

Mitchell's advent in the Elkhorn field is significant in one important respect, in that it indicates the interest that the Connellsville coke people are taking in the Elkhorn field, and the connection of Mr. Mitchell with the field is the strongest possible demonstration of his faith in it.

Mr. Mitchell has been at the head of the W. J. Rainey coke interests of Connellsville for more than 30 years, and is recognized as one of the leading coke producers of the United States. When he went into the Connellsville field in 1878 there were only 5000 ovens in the district, so that he has been identified with the Connellsville field from the beginning of this important development. When W. J. Rainey of Cleveland started in the coke-making business in the district he began with only 50 ovens. Mitchell developed his business until at the present time there are nearly 3000 ovens owned by the Rainey interests, and when W. J. Rainey died in 1900 he was the largest individual coke producer in the world. The Rainey coking interests are credited by bankers in



ROYAL PLANT OF W. J. RAINEY, SHOWING BIN, TIPPLE AND BATTERY OF MITCHELL COKE OVENS.

highest reputation. The announcement stated that the Mitchell Coke Co. had been organized to enter the Elkhorn field; that the work of building coke ovens has already begun, and that Mr. Mitchell, for many years in charge of the W. J. Rainey operations—the largest coke makers in the Connellsville district outside of the Frick Company—who heads the new company, unqualifiedly endorses the Elkhorn coke as of the highest purity and strength, and predicts for the Elkhorn field a position as one of the greatest coke-making centers in the world.

The advent of T. J. Mitchell into the Elkhorn coking coal fields is a move of great importance and significance. It means that here is to be established a serious rival to the Connellsville coke field—really, that here is to be the successor of the Connellsville field. Some of the most noted coke experts in America say that the Elkhorn coke outranks even the Connellsville coke in purity. The original Connellsville field is being worked out, and all along the railroad as one rides through the section abandoned coke ovens may be seen, owing to this fact. It is a rare thing to find in the Connellsville coke of today less than 1 per cent. of sulphur. In the Elkhorn coke the sulphur runs generally less than one-half of 1 per cent., making it now the purest not only in this country, but in the world, as the tables of the Continental authorities prove.

The late Peter Kimberly of Sharon, Pa., in his lifetime one of the large iron men of the Mahoning and Shenango valleys, said that the Elkhorn coke is intrinsically worth \$1 a ton more than Connellsville coke, for the reason that it will cost more



MITCHELL CONVEYOR, FOR CONVEYING, SCREENING AND LOADING COKE.

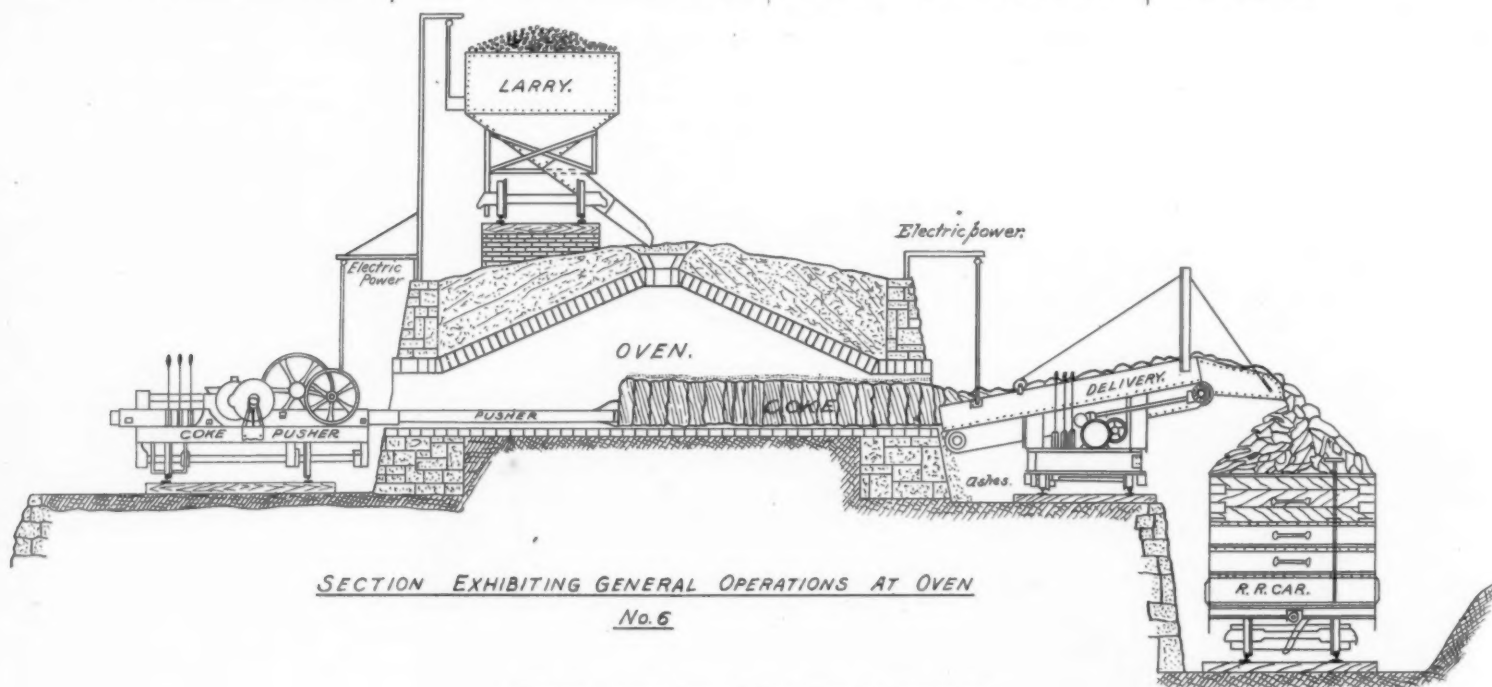
the Connellsville district with paying profits of from \$2,000,000 to \$3,000,000 a year.

If Mr. Mitchell had done nothing but successfully develop the Rainey interests it would be of great advantage to the Elkhorn district to have him identified with its development. However, on top of his long and successful experience there is the further fact that Mitchell has been an inventor of new processes, and as a result

coke oven by hand is probably the most distressful and destroying work that a human being can engage in. By the Mitchell processes the modern development of the electrical trolley and the electric motor is fully utilized. The Mitchell oven is of rectangular shape, with doors at either end to permit the use of the ram or unloader, and having a dome so formed and shaped as to protect the heat in such a manner as to coke the entire charge of

ovens are charged by electrically-driven laries, as in the ordinary type of oven, and the coke is leveled by a mechanical leveler. When the coke is ready to be drawn a mechanical sprinkler cools the coke in the ovens in three or four minutes, and a mechanical drawer, or ram operating in a telescopic manner, shifts the charge of coke onto a conveyor or loader, which screens and delivers the coke to the car, and the whole process requires only a

and reloading, but by it the percentage of coke secured is very high. In the ordinary beehive oven 66 per cent. is regarded as very satisfactory, and in the by-product processes 72 per cent. In the Mitchell oven it runs from 68.26 to 73 per cent., an increase over the fixed carbon in the coal, the result being secured through the carbon in the volatile matter being deposited in the coke and uniting with the fixed carbon of the coal.



MITCHELL COKE OVEN AND MITCHELL PROCESSES.

of his 30 years' experience he has evolved ovens and machines for coke-making which constitute nothing short of a revolution in the business.

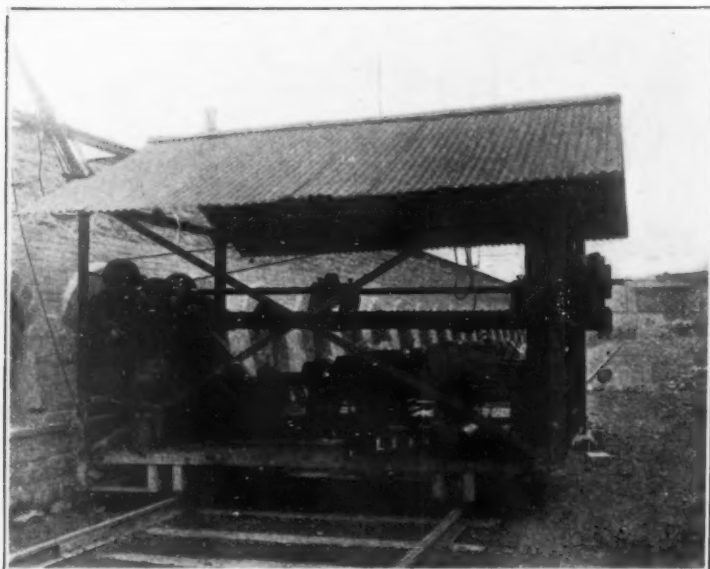
According to Mr. Mitchell, it has been demonstrated that the cost of making coke can be reduced at least 75 per cent. In other words, while it requires about 40 cents a ton to make coke in the beehive oven, the Mitchell processes will, he says, turn it out for 10 cents or less. This refers to the actual cost of making coke, from

coal uniformly throughout. It is entirely different in construction and theory from the Belgian oven, which makes use of separate flues, through the sides of which the heat of the waste gases penetrates the coal in process of coking. The Mitchell oven is much more simple, and it has been demonstrated by practice that it is equally efficient. That is to say, as high a proportion of coke is secured from a ton of coal as in the best Belgian practice, while the cost of installation of the Mitchell

few minutes' time, and the coke is delivered in excellent and unbroken condition into the cars. In actual practice a charge of coke is unloaded and the ovens recharged in five minutes or less, to the great advantage of retaining the heat in the oven which otherwise, by the old processes, is cooled to such an extent that it takes something like six hours for the new charge to ignite. With the Mitchell process the heat of the oven is practically

The first Mitchell ovens were built about three years ago in the Connellsville district. At the present time there are about 1900 Mitchell ovens built and being built in the Connellsville field, and almost no other type is to be found among the new construction.

Mr. Mitchell is thoroughly familiar with the Elkhorn field, having made an investigation and analyses as long ago as 1893, when the Merritts of the Lake Super-



MITCHELL COAL LEVELER.

the time the coal leaves the bin to the delivery of the coke in the cars.

The Mitchell processes are an adaptation of machinery to the making of coke. The Mitchell oven, as the fundamental factor, makes possible the utilization of machinery in a way the beehive oven never could. In the beehive oven only manual labor can be employed, and the work is of the most man-killing kind. Drawing a

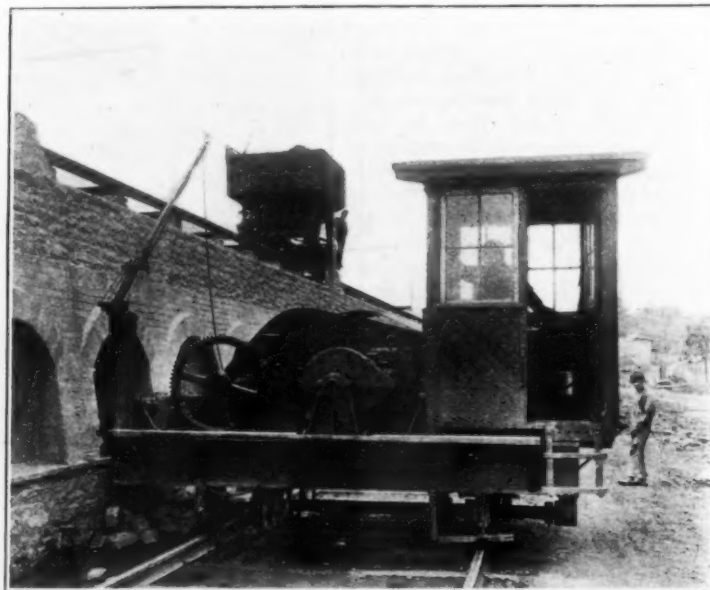
oven is but a fraction of that of the complicated Belgian oven.

With the machines invented and patented by Mr. Mitchell it is possible to draw a Mitchell oven practically instantaneously, resulting in a saving of from three to six hours in drawing and recharging an oven. Cuts accompanying this article give illustrations of the construction of the oven and the operation of the machines. The

retained intact, and the new charge of coke ignites almost immediately on the closing of the oven doors.

The Mitchell oven, which is covered by patents, is of larger capacity than the ordinary beehive, its output being about five and a half tons per oven, while that of the beehive is usually about four tons. Not only is the Mitchell oven of great advantage in the saving of time in drawing

rior region had arranged to go into the Elkhorn field and would have done so had not their fortune been swept away by the panic of 1893. He has never wavered in his faith in the district, and when the chance was for the second time opened up to him recently he very readily took advantage of the opportunity to round out his career as a coke master by opening up what he considers to be the most important



MITCHELL COKE RAM.

new coking coal field in the United States today.

In the preliminary organization of the Mitchell Coke Co. several of the present operations on the Marrowbone have been taken over. They have been operating some time, and have been marketing their coal all over the West. As the coal has been demonstrated to be too valuable for any other purpose than coke, it is proposed to make coke exclusively, as is done in the Connellsville district, no coal being marketed there for fuel purposes.

With the great strength and purity of the Elkhorn coke there will be the additional advantage of unexcelled cheapness in manufacture, and in cheapening the cost of steel production the new development will be an economic advantage of the first importance.

It is announced that the Chesapeake & Ohio Railway management is thoroughly alive to the possibilities which this development presents in the way of largely increased traffic for their line, and have been watching with keen interest the progress of negotiations for some time past. The Connellsville field is now giving the railroads serving it a coke tonnage alone of 20,000,000 tons a year. In addition to the Big Sandy branch of the Chesapeake & Ohio Railway, which was extended to Elkhorn some years ago at an expense of \$4,000,000, it is understood that as the Elkhorn coke industry is developed to a point where additional transportation facilities are desirable the Chesapeake & Ohio will construct branch lines. It is even stated the road might extend its Piney Creek branch into the Marrowbone country, which would give a direct eastern outlet to the coke from the Elkhorn region.

The Mitchell Coke Co. will be given the benefit of the open published freight rates from Hellier, Ky., to points in the Middle West, by which facilities and favorable rates compared with Connellsville are assured.

The culmination of these plans is a great personal triumph for Charles E. Hellier of Boston, who for 20 years has been the moving spirit in the development of the Big Sandy tract of 130,000 acres, on which the first Mitchell Coke Co.'s operations are located. Thoroughly imbued with an appreciation of the value of these properties, Mr. Hellier spent some years in perfecting titles and in rounding out a compact ownership. At that time there was no railroad communication with the section, and only by the greatest personal effort and persistent presentation of the situation was it possible for the building of a railroad to be secured. Mr. Hellier himself is largely entitled to the credit for the extension of the Chesapeake & Ohio branch road into the Elkhorn field some five years ago. He has always believed in the section, and regards the present inauguration of development as the beginning of the fulfillment of his ancient prophecy that in the course of time his Elkhorn possessions would be universally recognized as of the highest value.

Other interests in the Eastern Kentucky coal fields are represented in large holdings, such as the Northern Coal & Coke Co., J. C. C. Mayo, Isaac T. Mann and others, who thoroughly appreciate the value of the field, and a greater or less development has been going on for some time. Among the most important is a \$3,000,000 expenditure by the Consolidation Coal Co. of West Virginia on Miller's Creek. This, however, is a steam and domestic coal production, the Hellier development being the only one to undertake the utilization of the coking coals of the Elkhorn seams.

ALBERT PHENIX.

ASTONISHED AT SOUTHERN DEVELOPMENT

Representative of the English Rothschilds Enthusiastic Over Its Manifestations.

[Special Dispatch to Manufacturers' Record.]

Birmingham, Ala., November 2.

A party of English capitalists interested in the Southern Iron & Steel Co. have been in the district the past two days. Prominent among the visitors are Mr. Cecil Grenfell of the firm of Rothschild, bankers, London; Mr. Ernst H. Schiff of London and Mr. John Robinson of London. In the party were also W. W. Miller, a prominent attorney of New York; R. B. Van Cortlandt of the firm of Kean, Van Cortlandt & Co. of New York, and Mr. A. W. Thompson, former president of the Republic Iron & Steel Co. When interviewed this evening Mr. Grenfell said:

"You can say that I am astonished beyond words to express. I have often heard of the South, but have never been among you before. I had formed an idea that you had plenty of cotton and were a kind of a lazy, go-easy people, with not much energy. This trip has been a regular 'eye opener' to me and others of the party who have not visited your section before. I have visited California and Canada, but have never seen anything to equal the great development that is going on in the South. I have had an exceedingly fine trip. I want to add that I have never seen anything to equal the artistic marble decorations in your beautiful Empire building. I have seen many handsome structures, but none with finer marble decorations, and they tell me that you dug it right out of the hills of Alabama. As to the interests I represent, we think we have a great organization in the Southern Iron & Steel Co., and properties with great merit to them. I was also deeply impressed with the city of Gadsden and what I consider its great resources, and the feature that struck me was the unlimited water-power."

BIRMINGHAM PIG-IRON.

About Six Hundred Thousand Tons Sold During the Past Week.

[Special Cor. Manufacturers' Record.]
Birmingham, Ala., November 1.

The negotiations pending for heavy tonnages of Southern basic and low-grade pig resulted in the actual sale the past week of something like 25,000 to 30,000 tons of the former metal and 30,000 tons of the latter for delivery the remainder of the present calendar year and over the first half of 1910. In each of the above cases the base price was \$15 per ton f. o. b. cars Birmingham. A good round lot of gray forge was disposed of by one of the principal interests here at \$13.50 per ton at the furnace for delivery the balance of this year. It is understood that some of the furnace companies have on hand for prompt shipment small lots of No. 4 foundry and white irons, but for same a differential of at least 25 cents per ton over No. 2 foundry base would be asked. It is believed by those well informed that the month of October will show a greater tonnage produced by the furnaces in the district and Alabama than for many months past. Yet the stocks in the yards do not indicate that such a production has left its trace. This is clearly indicative of the heavy melting that is going on throughout the country. The order books of the companies show up in fine shape, and their exceptionally healthy condition accentuates the fact that there is not only no disposition or inclination to vary the base price downward, but, on the other hand, a tighter and firmer grip is being fixed to maintain the \$15 level. Resale iron is still being disposed of, and wherever a concession in price appears it is

not hard to trace its origin. The charcoal iron market has taken on another advance of 50 cents per ton, making the price of same \$22 per ton at the furnace, with probability of some slight concession for non-chilling grades.

During the past week some of the operators in the district have advanced their prices 5 to 10 cents per ton on coal. One of the largest dealers in coal stated today that there was a considerably better feeling existing and that inquiries were very much on the upgrade. Coke continues active and every available oven is being taxed, with additional ones being put in commission as promptly as repairs can be made to same, \$3.50 to \$3.75 per ton, with \$4 for special brand coke, being asked.

The advance in price of this product is not at all commensurate with that of pig-iron, and for that reason manufacturers are not disposed to look far ahead. Inquiries for water pipe have slackened somewhat, due probably to the approach of cold weather. The demand, however, for gas pipe is somewhat better. Manufacturers are quoting as follows f. o. b. cars at the foundry: 4-inch, \$25; 6, 8 and 10-inch, \$23; 12-inch and over, \$22 average, with a dollar a ton advance for gas pipe; fittings, \$55 per ton.

The demand for scrap of all kind has not been so brisk during the week just past, but dealers are able to dispose of their stock from time to time. On account of the scarcity of low-grade pig the demand for strictly first-class cast is good. The stock of scrap in the yards is not large. However, it looks as though the high mark in scrap prices has been reached, for a time at least. Dealers are quoting as follows:

Old iron axes, \$20.50 to \$21.
Old iron rails, \$16 to \$16.50.
Old steel axes, \$18 to \$18.50.
No. 1 railroad wrought, \$14 to \$14.50.
No. 2 railroad wrought, \$12 to \$12.50.
Dealers' mixed wrought, \$11 to \$11.50.
Old steel rails, \$12.50 to \$13.
No. 1 machinery, \$12.50 to \$13.
No. 2 steel, \$12.50 to \$13.
Old standard car wheels, \$14 to \$14.50.
Light castings, stove plates, \$10 to \$10.50.
Cast borings, \$6.50 to \$7.

Hickman, Williams & Co. have been appointed sole agents for the product of the plant of the Sheffield Coal & Iron Co., Sheffield, Ala. One of the furnaces of this company has just been blown in on the manufacture of foundry iron.

Mr. Chas. M. Schwab, president of the Bethlehem Steel Co., spent one day during the past week in the district as guest of Mr. Geo. G. Crawford, president of the Tennessee Coal, Iron & Railroad Co. Mr. Schwab visited the Ensley steel plant while here.

A MODEL ALABAMA CITY.

Planned to Adjoin the Ensley Plant of the Tennessee Company.

[Special Dispatch to Manufacturers' Record.]
Birmingham, Ala., November 2.

A model city, planned on the order of Gary, Ind., the great steel-making center, is the latest move made by some of Birmingham's progressive citizens. To that end a company known as the Corey Land Co. has been formed with capital stock of \$500,000, which was over-subscribed. This provides ample working capital for the company. The officers are: Robert Jemison, Jr., president; Walker Percy, vice-president, and A. B. Tanner, secre-

tary-treasurer. The directors are W. P. G. Harding, president of the First National Bank; Robert Jemison, Jr., Walker Percy, Otto Marx, Lee C. Bradley, John L. Kaul and H. B. Gray, all ranking among the leading men of Birmingham. Nearly 300 acres of land have been acquired by the company adjoining the large tract of land recently bought by the Tennessee Coal, Iron & Railroad Co. at a cost of something like \$1,250,000, on which it intends to build a large number of by-product coke ovens and make other extensive industrial improvements. The property lies between Ensley and Wylam and fronts the Tennessee Company's land, thus forming the only logical ingress and egress thereto.

A model city is proposed, both as to business and residential sections, and its name may be Corey. It will be in keeping with the proposed large development work that is to be carried out by the Tennessee Company and for which purposes it has purchased a vast acreage in the vicinity of Ensley and Wylam, extending down several miles to the properties of the Woodward Iron Co. at Woodward, at a cost of over \$2,250,000, thus bringing it in possession of an area about twenty times as large as the former holdings of the company in that section. Railroad facilities through these properties are all that could be desired, it being traversed by the Southern Railway, Louisville & Nashville, Frisco and Birmingham Southern. With all these contemplated improvements, to cost many millions, before their minds, the parties interested in the land company have clearly seen what the future needs for such facilities for the employees of the Tennessee Company will necessarily be, and with that end in view the proposed town will be up to date in every respect, having the best street improvements available—sewer, water, gas, electric lights and car service.

This new company will have the benefit of the services of the officials of the Jemison Real Estate & Insurance Co. of Birmingham, Mr. Robert Jemison, the president of the company, being president of the Corey Land Co. About one-third of the proposed town will be within the present limits of Ensley, and should Avenue E of that city be extended it would run almost through the center of the proposed town. The balance of the town will adjoin the limits of Greater Birmingham.

The magnitude of the work which the United States Steel Corporation is doing in the development of the properties of the Tennessee Coal, Iron & Railroad Co. has made necessary the building of the town of Gary to furnish an adequate place for dwellings for operatives as well as a business center for the trade of many thousands of men.

Broadax Power Co.

The Broadax Power Co. is now planning the construction of its proposed water-power-electric plant on the Saluda River, six miles from Greenville, S. C. This company's holdings have been purchased by the United States Guaranty Co., John V. Ryan, president, 28 Royal street, Mobile, Ala., which will increase the capital stock to \$250,000 and issue bonds for \$500,000. The plant will be designed to develop from 4000 to 4500 horse-power for transmission by electricity, and the company is now prepared to receive estimates on both the water-power and the electrical machinery. Address Mr. Ryan at Mobile.

Commissioner Watson of the South Carolina department of agriculture, commerce and labor reports that during the past five years the water horse-power in use in his State has increased from about 51,000 to more than 70,000.

\$1,000,000 CEMENT PLANT.

Big Undertaking at Ragland Rapidly Nearing Completion.

[Special Cor. Manufacturers' Record.]
Ragland, Ala., October 28.

Work is progressing rapidly on the million-dollar plant of the Atlantic & Gulf Portland Cement Co. This plant, designed for a capacity of 3000 barrels, will, it is expected, be ready to turn out 1500 barrels a day by January 1. It is now about 75 per cent. completed. The accompanying photographs illustrate its extent. It has been built under the direction of Mr. J. S.

power low-speed condensing Hardie-Tynes Corliss engines. This concern has chosen what seems to be an ideal location for its plant, which is within a mile of the coal mines, insuring a cheap supply of fuel. It likewise owns over 4000 acres of coal land, the total number of workable seams making a coal deposit 19 feet thick, and has an ample supply of limestone and other materials needed in cement-making. The cost of the plant and equipment will be approximately \$832,000. The officers and directors of the company are practical cement men, being interested in several

factures a fine grade of vitrified brick, but it is the intention of the company to engage also in making building brick. A recent order from Selma, Ala., was received for 1,500,000 bricks for paving in that city, and other orders are in hand to such an extent that the company has been compelled to refuse to quote prices for several months ahead. The capacity of the plant, which was formerly 25,000 vitrified paving bricks per day, will be increased to 35,000, and to this will also be added the equipment for making building brick. The officers of this company, all

therance of peanut culture in the surrounding country. It will be probably the most important of that organization's winter functions. Secretary Geo. R. Brown of the Board of Trade says:

"We have been watching for some time past the development of the peanut industry just over the State line in Louisiana, and it is a pleasure to report the successful result of the conference with Mr. McNair. He says not only have we the proper soil for the product, but that the time is ripe for undertaking its development. Not only this, but he and other exports of the department will help. Talking on the subject, the expert stated to us:

"1. That the sandy soil around Little Rock is splendidly adapted to the successful growth of the product; that, in fact, all the sandy land from the mouth of the Arkansas River to the Oklahoma State line, as well as that of the tops of the hills, is suitable, and on that account the business men from the entire valley should be invited and urged to be present at the January meeting. Therefore, those cities and communities interested should send representatives.

"2. Sandy land will produce two bushels of peanuts to one of corn, worth for peanuts \$1.50 per bushel to 60 to 70 cents per bushel for the corn, and at the same time the nut is a land improver. The sandy lands adjacent to Little Rock will produce 40 to 50 bushels to the acre; value, 75 cents per bushel for the nuts, with \$12 for the ton of hay per acre from the tops of the vines.

"3. The machinery necessary is a thresher, one for each group of growers. There are several companies making a specialty of these machines, and one with a gasoline engine that will handle 200 bushels per day can be bought for \$150.

"4. In case of a slump at any time in the price of the nut, it will be found to be one of the farm's most useful products, the stock being especially fond of it.

"5. This year shows the production a success in the Russton and Shreveport sections, where W. R. Beattie, assistant horticulturist of the Department of Agriculture, Washington, has been working with the people. At Russton the owner of one thresher says he has handled 2500 bushels, and is about half through. There are three other threshers at work there, and it would be fair to say there are 20,000 acres in nuts at Russton. At Shreveport the acreage is about one-half as much, and at that point the cottonseed-oil mills are experimenting for peanut oil.

"The foregoing is the substance of what Mr. McNair had to say to us," said Mr. Brown. "We have extended an invitation to Mr. W. R. Beattie to be here with Mr. McNair, and have every assurance that he will accept the invitation. We think that by holding this meeting here in January that it will enable our farmers to plant in May and get their share of this very profitable crop. Following the development of this branch of agriculture should come the erection of a mill at Little Rock to shell the nuts. The location of this city should make it the trade center for nuts, particularly as we are already receiving quite a number of inquiries from parties who desire to purchase—one a day or two since was from the leading manufacturer of peanut butter on the Pacific coast."

The Commercial Club of Pecos, Tex., Mr. M. L. Swinehart, secretary, has issued an interesting booklet telling of the opportunities of the "City of flowing wells."

The Board of Trade of Clarksburg, W. Va., Mr. A. K. Thorne, secretary, is circulating a leaflet telling of the city's equipment for industry.



GENERAL VIEW OF CEMENT PLANT AT RAGLAND.

Herbert, M.E., chief engineer and general superintendent. The work of excavation started in March last, and construction work has been vigorously pushed since then. It is to be one of the best-constructed cement plants in the country, having the most modern and improved methods of operation. Every machine will be driven by individual motors. The operation of the plant will be automatic from the time the limestone and shale are put into the crushers until the cement is loaded in sacks and barrels on the cars. This plant is located on a large tract of land

cement works in the Lehigh Valley, Pennsylvania. The home office is at Nazareth, Pa., while the construction, engineering and purchasing departments are located at Ragland.

Another great undertaking calculated to have an important effect upon the growth of this place is the development by the Ragland Water Power Co. at Lock No. 4 of 15,000 to 20,000 horse-power for electric transmission. W. T. Brown, president of this company, is one of the most active men in this community. He is a man of large means, and I am informed

of whom are from Atlanta, are: President, John R. Wilkinson; vice-president and general manager, C. H. Pittman; secretary and treasurer, A. R. Colcord, and general counsel, A. A. Bancker.

A prosperous shingle mill is also located here, and a recent discovery of fine molders' sand is now being exploited and several carloads per day are being shipped to different points in the State by R. J. Berry of Anniston and the Kirkpatrick Sand & Cement Co. of Birmingham.

It is believed that there is an excellent opportunity for a cotton mill at this point, and especially for one to make bags, since the cement company will be a large user of cotton bags. On account of an excellent deposit of clay in this vicinity, pipe works and pottery would also find an abundant supply of raw material. Among the inducements to locate at this point will be a free site and exemption from taxation, while local capital will be subscribed to new industries on a sound basis.

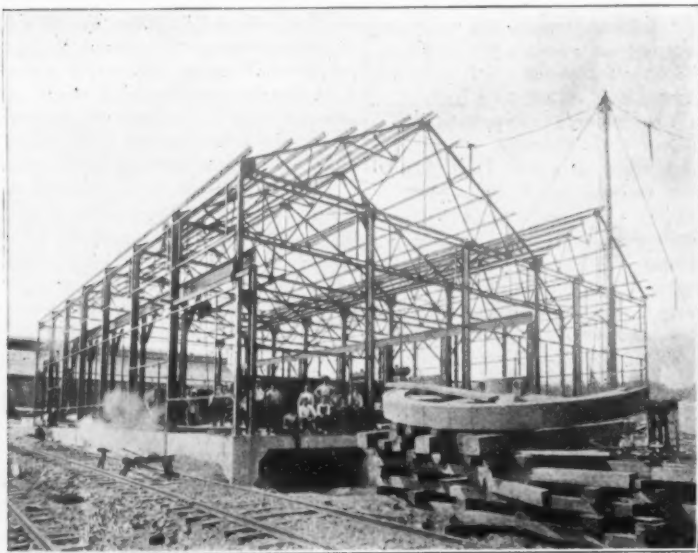
Ragland is blessed with many natural advantages, and proposes to take advantage of them. It is on the Seaboard Air Line, about midway between Atlanta and Birmingham. It is but a short distance from Gadsden and Anniston; its geographical position makes it almost the hub of the State. Its favorable location and its resources make it a logical place at which to build a prosperous town. Here is an abundant supply of raw materials of many kinds, such as coal, iron ore, limestone, shale, kaolin, sand, pottery clay and brown mineral paint. With these many advantages, with excellent health, with pure water, good schools, Ragland presents many opportunities as a place of residence and a location of business. Any information desired about this section can be had from Mr. W. T. Brown. I. S. FIELD.

PEANUTS FOR ARKANSAS.

A Movement to Further Their Culture Around Little Rock.

[Special Cor. Manufacturers' Record.]
Little Rock, Ark., October 30.

The Board of Trade has had a conference with A. D. McNair, expert of the bureau of plant industry of the National Department of Agriculture, at which it was arranged to hold a big meeting at the Board of Trade in January for the fur-



CHARACTER OF CONSTRUCTION OF CEMENT PLANT AT RAGLAND.

about half a mile south of the Seaboard Air Line depot. Three spur tracks have been completed into its yards, providing ample shipping facilities. The buildings will cover about five acres. They are located close to the Coosa River, thus securing the benefit of river transportation, but high enough above its banks to guard against possible overflow in high-water periods. The plant will require 2300 horse-power, which will be supplied by induction motors. These will be of three-phase type, current being supplied from three 600-kilowatt three-phase alternators connected directly to three 1000-horse-

power that the company has been financed and is now ready to go ahead developing power. The primary object of this company is to furnish cheap power as one of the inducements to attract industries to Ragland, as well as to provide for electric-lighting purposes. The company has a broad charter, and already possesses all the necessary riparian rights.

The Wilpicochia Clay Works is one of the most prosperous manufacturing industries located at this place. Its capital stock is to be increased from \$50,000 to \$100,000, and \$40,000 will be spent for enlargement and improvements. It manu-

A STUDY IN UNITED STATES STEEL.

By WALTER M. KELLEY of Tallapoosa, Ga.

[Written for the Manufacturers' Record.]

Many are the published opinions expressed during these days on the value of the United States Steel Corporation stocks and on the probabilities of continued dividends, more especially referring to the value of the common stock issue. In considering these opinions one is forced to believe that the authors are still looking at the company as of April, 1901, the date of its incorporation, and have not kept pace with its wonderful advance as a manufacturing power. If one does not keep in view the growing consumption of iron and steel in this country they cannot possibly appreciate the steadily increasing value of the Corporation property.

If one looks at the steady increase in the demand for iron and steel in the United States since 1880 and notes that the demand has about doubled in each decade, our demand now being equal to all the balance of the world combined, will it not be plain that to supply the country's needs during the next 40 years, which period may record its most rapid development, the United States Steel Corporation will see years of wonderful prosperity and its property greatly increased in value?

The constantly increasing demand for iron and steel in the United States for the last 30 years has been most striking, doubling each 10 years, as the following statement shows:

	Tons.
In 1880, total production.....	3,200,000
In 1890, total production.....	7,400,000
In 1900, total production.....	15,200,000
In 1909, producing at rate of.....	28,500,000

It is not possible for this ratio of increase in production to continue. It would mean in 1950 a total tonnage of 480,000,000, an impossible tonnage, as the available and known raw material of ore and coal could not be supplied, nor could mills be provided to produce the metal. It is, however, reasonable to look for a demand each decade of 25 per cent. greater than the one preceding, and on this moderate estimate the total tonnage of iron in 1950 will total 73,000,000 tons.

In 1901, when the Corporation was organized, its production was very close to 60 per cent. of the total of the country, or about 9,500,000 tons, and should it keep up this proportionate production, or should it fall back to 50 per cent. during the 40-year period, in 1950 it will produce a total of 36,000,000 tons. Assuming this estimated tonnage to be a reasonable one, as it undoubtedly is, and placing the profit per ton at \$10, on this basis the gross profits of the Corporation in 1950 will total \$360,000,000.

This forecast is by no means a "play upon figures," but is arrived at by conservatively estimating the country's requirements, as above explained; in fact, our opinion is the estimate is considerably below what the years will actually show.

Placing the production of the country in 1910 at 30,000,000 tons, which is entirely probable, the proportion that will be made by the United States Steel Corporation each decade, if the rate of increase in its production shown since its incorporation is continued (its capacity now being at the rate of 14,500,000 tons per year, as compared with 9,500,000 tons in 1901), will show as follows:

	Total production, United States.	Steel Cor. proportion, 50 per cent.	Total profits, \$10 per ton.
1920..	38,500,000 tons.	19,250,000 tons.	\$187,500,000
1930..	46,875,000 tons.	23,437,500 tons.	\$234,000,000
1940..	58,500,000 tons.	29,250,000 tons.	\$292,000,000
1950..	73,240,000 tons.	36,620,000 tons.	\$366,000,000

While these figures may appear to many to be entirely out of reason, who is there to dispute them or to prove that the basis on which they have been figured is in

plant at Gary, Ind., and in betterments to the older plants.

The profits from one-half of this new tonnage alone, at \$10 per ton, will take care of the dividends on the common stock issue. The stronger position of the Corporation, through this wise expenditure of earnings, while it deprived the common stock of regular dividends, should have added at least \$30 per share to its value. This constant increase in capacity must go on to keep up with the growing demands of the country.

It is to be feared there is not a clear appreciation of the other great element of strength added to the Corporation through the purchase of the Tennessee Coal, Iron & Railroad Co. property. Aside from the blast furnaces, coal and ore mines and steel mills taken over, the Corporation came into possession of 600,000 acres of ore and coal lands of Georgia, Alabama, Tennessee and Kentucky. This is a great acreage, and while its total ore tonnage has not been fully determined, estimates of the ore have been made of 600,000,000 tons. On a royalty basis of 50 cents per ton, or one-half of the royalty value of the Lake Superior region, the ore in the ground shows a value of \$300,000,000, or a sum equal to \$60 per share on the common stock.

The acquiring of this property gives the Corporation a vast tonnage of coal and ore in the South, right in the heart of that portion of the country destined to show the greatest rate of development in the next 40 years, as it has been held back in the past. When these Alabama properties are fairly developed, say producing 2,500,000 tons per year, the shipments of a corresponding tonnage of finished shapes from the mills of the Corporation in the North will cease, and the Birmingham department will supply the Southern trade. What will be the advantage of this? It will be at least \$2 per ton of product in the lower cost, and a further saving of \$5 per ton in railroad freights due to the lower distributing rates from Birmingham to Southern delivery points, as compared with the rates now ruling from the mills in Ohio, Illinois and Pennsylvania. This saving of \$7 per ton on 2,500,000 tons of product will simply mean an increase in the earnings of the Corporation of \$17,500,000 per year over the profit they would have had had the Tennessee Coal, Iron & Railroad Co. not been acquired and their Southern trade supplied from the Northern mills. It should be noted that this \$17,500,000 will be clear gain, due to the ownership of the Alabama properties, and is over and above the average profit now netted on finished goods shipped into the South.

Investors have not fully grasped the full value of these Alabama properties to the Corporation. In 1898 the writer urged the Carnegie Steel Co. to secure them; the stock was \$18 per share. The day had come for producing steel in the South; the removal of all patent restrictions on the basic process had made it possible. It was so clear that the interest securing these properties, with ability to develop them, would be in position to guide this steel development, which could no longer be held back. Under the guidance of the Steel Corporation we are now to see that work have full play, but it will not be on competitive lines to demoralize the trade, but on lines of harmony with the other producing centers.

Holding this commanding position in the trade, the inevitable conclusions are: First—The constant increase in demand for iron and steel products, and the policy of the Corporation being to add to its producing capacity to keep pace with the new demands assures the company of a constantly increasing income. If but one-half the new tonnage capacity added since

1901 is utilized, the increased net earnings from this source alone will pay the dividends on a common stock. There is nothing more certain than the country's demands will continue to grow.

Second—That the purchase of the Tennessee Coal, Iron & Railroad Co. property, with its great resources of undeveloped ore and coal in the South, where a great future demand for steel will occur, has greatly strengthened the position of the Corporation, doubling its holdings of raw material, lessening the cost of manufacture and adding vastly to its profit-earning ability.

With its commanding position as a producer, fortified by its vast holdings of raw materials—its possessions in the South rivaling its holdings in the North—properties that cannot be duplicated by any rival that may come into the field places the Steel Corporation in an impregnable position and absolutely assures for its securities increasing values. The stock values may and no doubt will fluctuate with the ebb and flow of the business tides, and there will be the ever recurrent opportunity for the speculator to buy and sell, but the future value of the stock is absolutely assured, always assuming that the management continues to measure up to that of the past, the stock of the Corporation will steadily increase in value as its permanent dividend-earning capacity is fully realized.

RAILROADS AND PEOPLE.

They Must Unite for Southern Development.

[Written by request for Atlanta Constitution by the Editor of the Manufacturers' Record.]

The Constitution's criticism of Southern railroads and of our Southern people for not waking up to the opportunities which await utilization presents a situation which has two sides to it.

If Southern railroads carried out a great, broad, comprehensive scheme of attracting capital and people South they would soon be so overcrowded with business as to compel a vast increase in their facilities and an expansion of railroad building far beyond anything they have ever done. It is so much easier to go along as at present, for, under existing conditions, slow growth can be more easily taken care of. Therefore, why hustle? On the part of the railroads, they can partly justify themselves on the ground that Southern people, broadly speaking, do not co-operate with them, and that Southern towns and farm communities do not strive consistently and persistently to attract settlers and capital, and even when settlers and capital come, they do not do enough to make both feel at home and safe.

The outside man, be he American or foreigner, is not always given the glad hand of welcome in spirit and in deed, as is done in the West and on the Pacific coast.

That's one side.

Here is the other side:

We are too well satisfied with ourselves; too prone to believe that because the Almighty has blessed our country beyond any other land He will force the world to come to us. On the contrary, our vast resources are a trust; they are given for the benefit of our land and of the world, but unless we do the work of developing them and of turning them into sources of employment and wealth creation they will be as worthless as the vast resources of China or darkest Africa. Because we do not do our full part, many of our best young men, the men who would be great leaders in every good work in material upbuilding in public and in religious activities, go elsewhere

to breathe a more active, virile business atmosphere.

The South's Greatest Loss.

The loss to the South by emigration since 1865 is infinitely greater than the loss by the war itself. Since 1865, 2,500,000 Southern-born whites have gone entirely outside of the South, to the impoverishment of the South and the enrichment of other sections. This does not include the hundreds of thousands who have gone to Texas and Arkansas, but those who have gone entirely beyond the borders of the South.

Southern railroads with a short-sightedness that is incomprehensible have done all in their power to induce Southern people to leave this section and go elsewhere. They have freely distributed the most attractive literature provided by the railroads of the West and Southwest; they have offered low excursion rates, and their passenger agents for the few paltry dollars earned by carrying people out of the country have done all in their power up and down the land to tempt the people of the South to go elsewhere. Some few Southern railroad officials of recent years have come to a realization of the tremendous injury that they are in this way doing the South, and thus doing themselves, but some of them are still at it. Possibly there is less of this activity and rivalry on the part of Southern roads to induce people of this section to move elsewhere than formerly, but should Southern railroads spend \$10,000,000 in attracting people to the South they would still not counterbalance the harm wrought by their work in trying to get people out of the South merely for a few dollars in fares.

Men are a greater asset than coal and iron or cotton, and the loss of men has been infinitely greater to the South than would have been the loss of many of our natural resources. Political economists estimate the value of a man to a community at from \$2000 to \$10,000. If we put the average value of those who have gone out of the South at \$2000, the loss to this section would be \$5,000,000,000.

The South could better have afforded to pay by taxation the cost of raising the last 10 cotton crops and have given to Europe and to the North, without a dollar in return, the 100,000,000 bales or more which have been raised in that time, than it could afford to give to other sections 2,500,000 of its best people. Through impoverishing ourselves we enriched others. The men who have gone out from the South are the leaders in educational and religious activities, the leaders in finance and railroad operations, the leaders in material development of all kinds in the North and West and on the Pacific coast.

Railroads Should Repair Damage.

The railroads were, to a large extent, responsible for inducing many of these people to leave.

It is, therefore, incumbent upon the railroads now to work still harder to bring back to the South the millions they have carried out, as well as to make known the resources and attractions of the South to many millions who yet know less of the South than they do of the West and Pacific coast.

Let me give a specific illustration of what railroads can do for the South's up-building. About 12 or 13 years ago William C. Lovering of Massachusetts, now a member of the House of Representatives, and who was then president of the Awkright Club, an association of New England cotton-mill owners, wrote me for some specific facts about cotton manufacturing in the South. Among others to whom Mr. Lovering's inquiry was communicated was E. St. John, then president of the Seaboard Air Line. With the en-

ergy which he had displayed in his Western railroad work, St. John immediately arranged, through D. A. Tompkins, a director of the road, and myself, to invite Mr. Lovering and four or five of his cotton-mill friends to visit the South. A special Seaboard train was put at the disposal of the party, and a 10-day trip was made. The Southern Railway requested the privilege of taking the train over some portions of its system, and this, of course, was done. As a direct outcome of the investigations made on that trip five cotton mills, each costing over \$1,000,000, were built in the South, including the Massachusetts mill at Rome, Ga., in which Mr. Lovering and his brother are leading factors, his brother being one of the chief owners or officials of that company.

Whatever may have been the results in other ways of Mr. St. John's management of the Seaboard, he certainly knew more about how to bring capital and farmers into the territory tributary to his line than any other railroad president who has operated in the Central South since his day.

There are a few men of broad ability in the industrial and immigration departments of some Southern roads who could duplicate St. John's work if they had the free hand of St. John, or were backed up by the executive management of the roads with sufficient liberality. In most cases, judging by the way in which the work is done, railroads in this section seem to regard the industrial and immigration departments as a necessary evil to which they must give just as little attention and furnish just as little money as possible. The managers are looking for immediate results, expecting to spend a dollar today and get back two tomorrow, on the same principle they permitted their passenger department for so many years to offer low rates in order to induce people to leave the South and go West.

People Also to Blame.

But while the railroads have thus been shortsighted, the people of the South, as a whole, have also been somewhat shortsighted. Neither the pot nor the kettle can afford to call the other black. Suppose, for instance, every town and city in the South was a duplicate in energy and work and vision of the South's possibilities of Atlanta. We would then have a thousand centers of life and energy, and all the railroads in the country couldn't tempt the people of the South to go elsewhere to look for a broader field. That the Atlanta spirit is not seen everywhere in the South; that Atlanta's progress is not duplicated in a hundred of other equally as well located places is not to the credit of the South. Even Atlanta, however, is being bent two to one by Seattle and Los Angeles and other Pacific coast cities that do not begin to have our natural resources and advantages. They grow despite the odds against them; we grow less rapidly than they, notwithstanding our wonderful advantages.

We really have not waked up, nor have our railroads.

Out in Texas there is the most remarkable movement of population in the history of our country. For several years over 200,000 Western people have been annually pouring into that State. Last year one railroad carried 87,000 Western settlers into Texas, and on one day took into that State 5000 through Kansas City. The results are marvelous progress in agriculture, in diversified farming and in town and city building, but the Central South has just as great advantages as Texas. In Texas the railroads and people alike are tremendously in earnest. They are working, not playing, at the matter. In this section we are too much like the man whose little son, when asked if his father was a Christian, said: "Yes,

but he is not working at it." Our railroads and people are professing to want more development, more people, more hustling, more life and energy, but they are not working at it with any degree of persistence and united action. They are trusting that somebody else will do their share of the work while they play, and a good many of them are laboring under the delusion that they are keeping pace with what is being done in other sections.

Broad Advertising Needed.

Southern railroads generally have not learned what California and Oregon and Washington railroads have learned and what they are practicing, and that is the value of the broadest kind of advertising to reach the people of the whole country, not expecting results today, but content to sow the seeds to reap the harvest by and by.

How Carnegie and Hill Made Millions.

Andrew Carnegie and James J. Hill have probably made more money by skillful advertising than any other men in America. In the line of shrewd advertising, as well as in knowing how to accumulate millions, they are experts of the highest order. For years Mr. Carnegie kept himself and the Carnegie Company before the public so effectually that the American people believed that by all odds his concern was far and away the greatest in the country. Very few knew that at the time the Steel Corporation was formed another iron and steel company in Pittsburgh had an output almost as great as Carnegie's. The world knew all about the Carnegie Company, but it didn't know about others.

Carnegie capitalized his reputation and sold to the Steel Corporation for two or three hundred million dollars more than he could have made had he not for years known and practiced the art of the widest possible publicity. The Steel Corporation's issue of securities, based in part on the ownership of the Carnegie plant, had less water than many have supposed. It was merely the turning into securities of the tremendous asset of the world-wide reputation of the Carnegie Company, and Mr. Carnegie thus capitalized and sold for some hundreds of millions the publicity work which he had carried on for years. This was equaled only by Mr. James J. Hill when he was getting ready to sell his iron-ore properties in the Lake region. For several years Mr. Hill never lost an opportunity to keep before the public the increasing value of iron ores and the vast quantity which he owned in the Lake region. There were many suggestions of the fact that these could not be duplicated at any price and that they would be very cheap at a dollar a ton in the ground, as they might furnish the basis for some independent steel company. Nobody knew very much about these properties, but the public finally came to believe that they were so immensely valuable that they were almost necessary to the existence of the Steel Corporation. When the Steel Corporation decided to make the purchase of these properties on the basis of about \$1 per ton in the ground, thus assuming an obligation of probably \$500,000,000, it was regarded as a master stroke by the general public, who knew nothing in the world about ores or about these particular ore properties. Like Carnegie, Mr. Hill had capitalized his publicity work to the extent of several hundred million dollars. The Steel Corporation could never have been floated without taking in the Carnegie plant, not so much because of its magnitude as because of the reputation won by Carnegie's magnificent publicity campaign running over many years. The Steel Corporation could never have met public approval in paying such a price

for the Hill ore properties if Hill hadn't made the public, by the most skillful work, believe that they were really essential to its welfare.

And so, after all, the great fortunes of Carnegie and Hill are largely due to the advertising which made possible the capitalization of the public sentiment that they had created about their own enterprises. The creation of such public sentiment of such widespread knowledge about any section or any business is one of its assets often more important than the natural resources of the country or the immediate direct results that follow a broad advertising campaign. The railroads of the Pacific Coast have learned these facts and act accordingly. The railroads of the South have not learned them, and, therefore, are not in a position to capitalize public sentiment to the great enrichment of this section. If the wonderful story which could be told about Georgia's cotton crop and the millions it will this year bring could be duplicated in the West, every railroad there would fill every magazine and every paper in America with such stories of cotton and its power for the creation of wealth and of the fact that cotton brings more than twice as much per acre as the wheat and corn of the prairie States, as to draw millions of capital for investment, but Southern railroads sit down and say nothing.

It is time to wake up.

Everglades Reclamation.

[Isidor Cohen in Miami Metropolis.]

I had the good fortune to secure a copy of the MANUFACTURERS' RECORD of October 7, containing an article on the reclamation of the Everglades, written by J. H. Reese, and I wish to express my appreciation for the masterly manner in which he elucidated the subject.

While I am not directly interested in this gigantic project, I am actuated by a feeling of pride, in which every Floridian doubtless shares in a work, the magnitude of which is in keeping with the progressive spirit of our people and will reflect credit upon the State as a whole and upon its efficient I. I. Board, which, under the able supervision of a determined leader, ex-Governor Napoleon B. Broward, had taken the initiative in this monumental undertaking which from present indications we are inspired with most encouraging hopes of success.

It is a relief to obtain unbiased information regarding this interesting subject, which has captivated the attention of thousands of people who never associated the State of Florida with anything as important as the reclamation of the famous Everglades. This lucid narrative of its inception and progress has a convincing influence over the minds of those whose timidity resolved itself into doubt as to the feasibility of the great plan, as unfolded by that Cracker genius, Governor Broward. As a Floridian I am proud of the master mind that contrived it, and am conscious of my duty to support those who are engaged in its execution.

For this reason, if for no other, I offer my congratulations to the author on the manner in which he handles the subject. It will tend to enlist the confidence of the people, whose co-operation is essential to the ultimate success of this remarkable enterprise. I also congratulate the publishers of the MANUFACTURERS' RECORD, whose business acumen and desire to serve their subscribers has given the article the wide publicity it deserves.

The report of the West Virginia State Board of Agriculture for the quarter ended with September deals with the addresses before the fifth and sixth annual meetings of the State Dairying Association.

FRENCH BROAD POWER.**Big Plans for Its Electrical Development to Be Pushed.**

[Special Cor. Manufacturers' Record.]

Asheville, N. C., November 2.

The North Carolina Electrical Power Co., now controlled by Capt. W. T. Weaver and associates through purchase made in 1908, is now preparing to proceed with the construction of a great hydro-electric plant on the French Broad River, two and a-half miles below Marshall and 19 miles by surveyed transmission line to Asheville. Active work of constructing the dam will begin in a few days. The river frontage in connection with the plant extends for about three miles on each side of the river, and there is assured power to maintain constantly the 4000 horse-power capacity to be developed by the plant, the possible overload under favorable conditions being 20 per cent. additional. The dam will be 500 feet in length and 30 feet high, and consists of about 18,000 cubic yards of cyclopean concrete. The stone powerhouse will be immediately below the dam, and there will be no canal. The equipment will include two 2200-horse-power generators actuated by vertical turbines. Captain Weaver's experience with the W. T. Weaver plant with horizontal wheels inclining him to the vertical form. High-power transmission lines will lead from the plant to the Ivy plant, owned by the company, a distance of five miles, and from the Ivy plant there are now lines extending to the original W. T. Weaver plant five miles down river from Asheville and which will serve as a central station for the diffusion of power. Such power as is not used by enterprises at Marshall will be transmitted to Asheville or farther, and with this end in view it is proposed to install a "boosting" apparatus to transform the current to 60,000 or even 100,000 voltage. The cost of the plant complete will be about \$400,000.

The plans for the plant were prepared by Chas. E. Waddell, consulting electrical engineer, Baltimore, and represent the most approved designs for electrical-power plants. Mr. Waddell's constant observation of the W. T. Weaver plant being of extreme value in the consideration of practical difficulties.

It is stated that the Southern Railway Co. has generously co-operated in making the new plant a possibility, having agreed to raise its tracks for a considerable distance to get them out of the way.

The great power of the company at Mountain Island, 15 miles below, which represents an available power of 10,000 horse-power, will not now be developed, but held in reserve. The new plant will give more power than is now demanded, but the company intends to anticipate future necessities for power.

DONALD GILLIS.

GROUPED ABOUT LUMBER.**Thriving Industries in and Near Richwood, W. Va.**

[Special Cor. Manufacturers' Record.]

Richwood, W. Va., October 27.

This distinctively manufacturing town is about the busiest spot on the West Virginia map in these days of expanding prosperity, and the outlook is bright for it to be still busier as the good times get further along.

The Cherry River Boom & Lumber Co. is the patron saint of the place, and following it up, and correlated with it, are a number of other concerns which enact the roles of assistant patrons. These are the Cherry River Paper Co., the big tannery belonging to the William F. Mosser Co., a clothespin factory, a butter-platter factory and a hub factory.

The Cherry River Boom & Lumber Co. has a big mill here—a mill that, on demand, can turn out 300,000 feet of lumber in a day's run. It also has a big mill at Camden-on-Gauley, 25 miles west. This concern owns more than 200,000 acres of land in this vicinity, with enough timber for many years' cutting. It has lately purchased from the Baltimore & Ohio Railroad Co. 70,000 acres of virgin forest lying principally on Williams River, which puts into the Gauley some 30 or 35 miles northwest of this place, and it is thought a large operation will be built about the place where the two rivers come together and another town such as this founded. The company since its purchase of the timber lands has bought up all the available level land lying about the mouth of Williams River, a fact which gives strength to the report of its intention to make that place the basis for another series of large operations. From 1000 to 1500 men are now employed by the Cherry River Boom & Lumber Co. in its mills and in the woods, most of them making headquarters here.

The other manufacturing institutions are also now working to full capacity, and, as said in the beginning, the town is as busy a place as can be found in the State. The most notable part of the new life with which the place has been seemingly endowed, however, is in connection with the big tannery. This has recently been added to until now its output is larger than that of any other sole-leather tannery in the world, the recent additions having doubled the capacity, which is now 2400 sides of sole leather each day—the hides of 1200 cattle. The plant is in two duplicate divisions, and the buildings cover, at a guess, from 12 to 15 acres of ground. The power plants are two, and consist of two 240-kilowatt General Electric motors, alternating current, direct connected. Each has a battery of six 150-horse-power boilers, with Dutch oven feed, for the easy handling of spent bark, which, with some coal, is the fuel used. The electricity is carried throughout the plant to motors of various sizes, by which the many machines are driven. There is also an air compressor, furnishing compressed air for agitating the vats and other purposes.

The process of tanning is easily followed from one end of the plant, where the hides come from the cars, through almost an acre of soaking vats to the machines that take off the hair; thence through hundreds of other vats where they are subjected to the effect of the tanning extracts in various conditions of strength; on through the drying-rooms, where the sides are hung up in such quantities as to bewilder the visitor, and then to the rollers, where they are straightened out ready for shipping, and whence they go to the cars that carry them to Boston. For this is a Boston concern, and everything turned out here goes directly to the Hub for distribution. Two cars are loaded each day, each carrying the output of one side of the plant, 1200 sides.

The tanning material used here is principally hemlock bark, though some imported quebracho extract is used, and also some mangrove bark and myrabolams. This latter is an African nut about the size of a man's thumb, which is so strong in tanning material that one ton of them makes as much extract as four tons of hemlock bark. The hemlock bark is ground up and then put into leaches, great casks that hold 18 tons of bark each, in which the strength is taken from it by the use of hot water. Twenty-four of these 18-ton leaches are used in the manufacture of the extract.

This tannery formerly used South American hides exclusively, but since it passed into the hands of the Mosser company it

is running for the most part on domestic packers' hides, though some are still received from abroad. There are 100,000 hides in the various departments of the plant at one time—100,000 sides in each division. This means somewhere about \$1,000,000 worth of stock.

The plant has its own sidings, shifting locomotive and a traction engine that serves to run the elevator that takes the bark from the railroad cars and carries it to the top of the immense barn-like piles, in which it is stacked against the time of its use. There is now about 13,000 tons of bark stacked on the yard. At times there is a much greater quantity than this.

This tannery is not only probably the largest exclusively sole-leather tannery in the world, but it is probably the most complete, for it is new or renewed to the condition to where it is the last word in tanneries, combining all the latest machinery and appliances known to the business. It is under the personal supervision of Mr. W. F. Kelse, the general manager, who has had long experience in the business, and keeps a careful eye upon all departments.

The Cherry River Paper Co. has also been making some improvements, and is still so engaged. These embrace for the most part a change in the electrical equipment. An Edison 40-cycle 220-kilowatt alternating dynamo is being installed for the purpose of furnishing lights and current for the motors installed in various departments of the plant.

The plant manufactures manila papers of various weights, wrapping papers, tag boards and box boards. Its output is about 75 tons daily. The pulpwood upon which it operates is furnished it by the Cherry River Boom & Lumber Co., and consists of hemlock and spruce. It works about 350 hands, under the supervision of Mr. C. B. Brooksbanks.

The town itself is not merely a lumber camp, such as is usually found about great lumber operations, but a solidly built and substantial municipality that gives promise of considerable further growth. It has water-works, electric-light and sewer system, two banks, good schools, a number of churches and many handsome residences. A lot sale recently made proved the means whereby more than 100 men secured ground of their own whereon to build homes, and many new residences will be under construction before the beginning of winter.

The fact is that Richwood has behind it a backing much more substantial and lasting than lumber mills and timber operations, for it is in a section of country underlaid with the great New River coal seams, and will one day be the scene of coal operations as important in their way as the big mills of the present day, and with a great deal more permanent of character. On Laurel Creek, two or three miles down Cherry River from here, mines have already been opened up and coke ovens built, and the coal found there justifies the prediction that Richwood is destined to be the central point of a great coal production.

GEO. BYRNE.

ACTIVITY IN COAL.**Operations in the Kentucky-Tennessee-Virginia Field.**

[Special Cor. Manufacturers' Record.]

Middlesboro, Ky., November 1.

Coal operators in the Kentucky, Tennessee and Virginia fields are entering upon a period of prosperity which will continue uninterruptedly during the winter, it is believed, unless a shortage of coal cars ties up operations.

Traffic along the Cumberland Valley division of the Louisville & Nashville Railroad has shown a great increase during the past month, and a number of ad-

ditional coal and coke trains have been put on to accommodate the heavy shipments from the Kentucky and Virginia fields. The Southern Railway, which transports the greater part of the coal output of the Middlesboro and Jellico districts, is likewise taxed to handle the increase in coal shipments over its lines. With a full resumption of activity at all the mines some trouble has been caused by a scarcity of labor.

On the Kentucky side several new operations have been started lately. The property of the Artemus-Jellico Coal Co. at Artemus has been purchased by Barbourville operators, and will be renovated and started up. The mines have been idle for two years. Extensive improvements are being made, and the new owners will soon begin shipments. The \$40,000 plant of the Lynn Camp Coal Co. was purchased last week by S. F. Rock, a Gray (Ky.) operator, who will begin developments at an early date. The plant is located at Roseland, and has been idle for over a year. Mr. Rock is president of the Stratford Coal Co., a new organization which is developing property near Gray, Ky.

A prolific field is being opened in Bell county by an extension of the Louisville & Nashville's Straight Creek line to Kettle Island, six miles ahead of present developments. This extension, which has been pushed vigorously for the past year, will open for development one of the richest sections of the famous Straight Creek field. Many thousands of dollars have been expended by local and Eastern capitalists in securing territory.

The extension of the Wasioto & Black Mountain Railway has likewise not been affected by the dullness which has prevailed in the coal trade for over a year, but has been pushed steadily forward into the vast coal fields of the Black Mountain region, in Harlan county. Much of this line is now complete, and within another year coal operations will be under good headway in the new field.

The counties of Southeastern Kentucky, which are now without transportation facilities, contain some of the richest veins of coal in the entire field, and lately territory in a number of these counties has been in great demand. In Clay county, which will soon be penetrated by a railroad, it is believed, several thousands of acres have changed hands lately. A railroad survey north from Barbourville into Clay and adjoining counties has been followed by the securing of rights of way, and the prospects are bright for the early beginning of construction work. Last week a party of New York and Birmingham capitalists spent several days in the field looking over the situation. Pennsylvanians recently purchased a desirable coal acreage in Clay county. Atlanta operators also are large holders of coal property, the investments aggregating a large sum.

Investments in the undeveloped fields of Harlan, Letcher and Leslie counties, which contain a fine grade of coking coal, indicate that those fields are regarded by capitalists as being in line for early development. Coking coal similar to the Elkhorn product in the Big Sandy Valley extends over a great part of these counties, which, on account of their inaccessibility, have not received much attention heretofore. Analysis of Letcher and Leslie coking coal show it to be the equal of any now under development. Two of the railroad systems have long been considering this as one of the most promising fields in the South, and railroad surveys into Harlan and Letcher counties show that construction work would not be as difficult as the earlier railroad builders thought.

W. S. HUDSON.

ALACRITY OF SOUTHERN COMMERCIAL BODIES FOR NEW INDUSTRIES

WHAT IS YOUR TOWN DOING?

The MANUFACTURERS' RECORD will be glad to receive from responsible correspondents in every town in the South brief items of news about business conditions and the opportunities for industrial enterprises. This information is desired for publication without cost of any kind to the sender, and regardless of whether the writer of the letter is a subscriber or not. The MANUFACTURERS' RECORD accepts no paid town write-ups. It seeks information of this kind from commercial and industrial organizations and from municipal authorities in every town and city of the South.

INDUCEMENTS FOR INVESTORS.

Business League.

Houston, Tex., October 25.

Editor Manufacturers' Record:

If a city possesses a certain degree of civic pride, its natural instinct is for the acquisition of a larger population and an increased number of manufacturing and commercial enterprises. Growth of numbers, wealth and power is an instinctive demand that belongs to a sense of good citizenship and is bound up with the spirit of patriotism.

This spirit, cultivated by the members of the Houston Business League, is responsible for the happy fruition of the hopes of her people, for never was there a city so convinced of its high destiny, so sure of the peculiar favors of Providence and so sure of the opportunities it possesses for the development of a citizenship of high character and capacity.

A judicious campaign of publicity recently inaugurated is becoming very telling in its effects, and many enterprises of industrial moment are now in process of formation, while the recent establishment of large fireproof distributing warehouses by Gaar, Scott & Co., the Parlin & Orendorff Implement Co., the Sherman-Williams Paint Co., the James Bute Company and the Schumacher Grocery Co. is indicative of the recognition of this city as being justly entitled to its claim as the only logical distributing point for one-half of the area of the empire of Texas, Mexico, Central America and the Canal Zone.

There are still many enterprises we are in need of, likewise many reasons why they should be located in this city. With low taxes, intelligent labor, unexcelled transportation facilities, including a choice of 17 trunk and independent lines of railroad, in addition to a deep-water outlet, with the lowest freight rates enjoyed by any city in Texas, with unlimited raw material, and a glad hand from the biggest-hearted community in the biggest city in the biggest State in the most glorious Union on the face of God's green earth, there would seem to be no logical reasons for hesitation. However, should there be, please communicate with

ADOLPH BOLDT,
Secretary.

WIDE-AWAKE WADESBORO.

Wide-Awake Club,

Wadesboro, N. C., October 29.

Editor Manufacturers' Record:

Wadesboro is 700 feet above sea-level and has a most healthful climate. Wadesboro has splendid churches, beautiful homes and graded schools, municipal water-works, sewerage and electric-light plant. All these things go to make Wadesboro an ideal city. It has never been a "boom" town, but has had a slow but sure and steady growth, erecting building after building and making improvement after improvement, and is soon to vote on the question of a bond issue for street improvements. Wadesboro has three strong banks, a most successful building and loan association (which has been in operation 19 years and has never lost a cent), a progressive real estate and insurance company, a large cotton mill and prospects

good for another one, two silk mills, brick plants, planing mills, furniture factory, a large cottonseed-oil mill, ice plant, fertilizer factory now building, three gineries, suit and skirt factory, harness factory, two newspapers, sash and door factory and many other industries which are now adding their part to the progress of the town. Wadesboro is also a splendid cotton market and a great live-stock market.

But what fortunate Wadesboro has as chief assets, and what will make it indeed great, is its railroad facilities. It now has the Seaboard Air Line and Atlantic Coast Line, and there is now being built the Southbound Railway to connect the Norfolk & Western at Winston-Salem with the Atlantic Coast Line at Wadesboro. There is also every reason to believe that the South Atlantic & Trans-Continental Railroad will be built to make an air line from the great Western grain fields and hog and cattle ranges to a deep-sea port at Southport, N. C. In addition, the Southern Railway is only 22 miles away at Norwood, and that will doubtless build through Wadesboro in self-defense. So it is very probable that Wadesboro will in the near future have three great trunk lines, and possibly four, crossing in its limits. It will have practically three within a year, that is certain.

The door of opportunity at Wadesboro is now open wide to the homeseeker, the capitalist, the manufacturer, the jobber and to the investor in all lines of human endeavor. With the above great lines of railways tapping the richest coal fields of the nation, which will lay coal down in Wadesboro cheaper than dreamed of a decade ago; with the Blewitt's Falls power plant, at which millions have been spent, and which will develop 30,000 horse-power, only 14 miles away; with the Richardson power plant, capable of developing 7000 to 9000 horse-power, only 15 miles away, surely this town, in the midst of a great timbered, agricultural and manufacturing section, on the road to the Panama canal and the Orient, is justified in asking all to come and share these good things with it.

For further information address Wadesboro Wide-Awake Club,

W. K. BOGGAN,
Secretary.

ROOM FOR INDUSTRIES.

McAlester, Okla., October 25.

Editor Manufacturers' Record:

Believing that the MANUFACTURERS' RECORD is the publication to reach the men with money who are willing to go against the natural resources of Oklahoma, your columns are used to let them know what and where they are.

Adjacent to Pittsburg, a new city of 90 days' growth, are large tracts of fertile prairie valley land that can be purchased at from \$10 to \$15 per acre. There are also large deposits of coal, iron and limestone, sandstone, brick shale and potter's clay.

Within wagon haul there is large acreage of oak and pine, and lumber can be had at \$13.50 per thousand. A four-and-one-half-foot-vein of the celebrated McAle-

ster coal is being worked by the McAlester-Edwards Coal Co.

Pittsburg is located on the Missouri, Kansas & Texas and the Chicago, Rock Island & Pacific railways, and with this transportation this vicinity offers elegant inducements for the manufacturers of lime, cement, brick, potter's clay and wood. The limestone in this vicinity has been tested by the Rock Island Railroad testing department and pronounced suitable for merchantable lime and cement.

F. B. DREW.

WATER - WORKS AND WATER-POWER.

Andrews, N. C., October 26.

Editor Manufacturers' Record:

Andrews will issue \$20,000 of 30-year bonds for the installation of a complete system of water-works, sewerage and fire protection. Water will be brought from a mountain stream about two and one-half miles by gravity, and a large reservoir and filtering plant will be installed. Dr. H. N. Wells is Mayor, and W. B. Fisher is town clerk and treasurer.

Surveys are also being made for the installation by the town of a hydro-electric power plant. It is expected that about 300 horse-power will be developed, and besides lighting the streets, electric power will be offered to factories at a very low rate.

On account of the splendid climate and cheapness of local labor, Andrews will be a splendid place for the location of cotton mills and woodworking industries.

J. Q. BARKER.

BUILDING AT TULSA.

Commercial Club.

Tulsa, Okla., October 26.

Editor Manufacturers' Record:

The congregation of the First Presbyterian Church will build a \$50,000 church building. The Rev. C. W. Kerr, pastor, is chairman of the construction committee.

Tulsa county has authorized \$200,000 of courthouse bonds. Construction will begin at once. Particulars are to be had from W. L. North, chairman of the County Commissioners, Tulsa.

E. T. TUCKER,
Corresponding Secretary.

FOR MUNICIPAL IMPROVEMENTS.

Program of the American Society's Convention at Little Rock.

At the sixteenth annual convention of the American Society of Municipal Improvements to be held at Little Rock, Ark., November 9-11, papers will be presented as follows:

"Proposed Franchise for a Public-Service Corporation," by C. C. Brown, editor *Municipal Engineering*, Indianapolis, Ind.

"Public Parks and Street Trees in City Planning," by William Solotaroff, superintendent East Orange (N. J.) Shade Tree Commission.

"Parks as Conservators of Natural Resources," by E. A. Parker, Kansas City, Mo.

"Small Gravity Water Systems," by Lucien Buck, C.E., Canton, N. C.

"Some Problems of Trade Waste Disposal," by Robert S. Weston, C.E., Boston.

"Disinfection of Sewage and Sewage Effluents," by Prof. Earl B. Phelps of the Massachusetts Institute of Technology.

"What the State of New Jersey Is Doing to Purify Its Streams," by H. M. Herbert, engineer of the New Jersey State Board of Health.

"Education in Municipal Sanitation," by Prof. Henry N. Ogden of Cornell University, Ithaca, N. Y.

"Materials for Sewer Inverts," by E.-S.

Rankin, engineer of sewers and drains, Newark, N. J.

"Public Comfort Stations," by Horace Andrews, C.E., Albany, N. Y.

"Commission Government," by Williams Doran, commissioner of streets and public property, Dallas, Texas.

"Garbage Reduction and Disposal of the By-Products," by Charles S. Wheelwright, president International Continuous Filter Press Co.

"Refuse Disposal by High Temperature Destructor System," by Col. William F. Morse, S.E., New York city.

"Brick Pavements, Good and Bad," by Will P. Blair, secretary National Paving Brick Manufacturers' Association.

"Some Notes on Toronto Pavements," by C. H. Rust, City Engineer, Toronto, Ont.

"Pavements and Their Grade Limitations in the Borough of the Bronx, New York," by S. C. Thompson, principal assistant engineer, bureau of highways, Borough of the Bronx, New York.

"Pavement Crowns and Concrete Foundations," by Geo. C. Warren, president Warren Bros. Company.

"Pavements Without Concrete Base; Their Durability and Retention of Evenness," by Paul E. Green, division engineer of streets, Chicago.

"Gutter Culverts on Paved Streets," by F. V. P. Ellsworth, City Engineer, Hot Springs, Ark.

"Gutter Culverts on Paved Streets," by J. H. Weatherford, City Engineer, Memphis, Tenn.

"Care of Surface Water at Street Intersections," by S. D. Newton, City Engineer, Knoxville, Tenn.

"Creosote Oil for Wood Block Pavements," by J. N. Hazlehurst, consulting engineer, Atlanta, Ga.

"Bituminous Pavements on Macadam Base," by Linn White, engineer South Park Commission, Chicago, Ill.

"Bitumens Used in Pavements," by J. W. Howard, consulting engineer, New York.

"Three Years' Experience with Oiling Roads," by F. A. Reimer, City Engineer, East Orange, N. J.

"Some Observations on Asphalt Paving and Some Present Needs," by Harry Tipper of the Texas Company, New York.

"Street Railway Location and Construction, and Paving Between Tracks," by J. N. Ambler, City Engineer, Winston, N. C.

"Advantages and Disadvantages of Alley Systems for Large Cities," by Wm. A. Howell, chief engineer of street department, Newark, N. J.

"Some Fundamentals," by F. D. Brown, City Engineer, Shawnee, Okla.

Reports of special committees on municipal franchises, on taxation and assessment, on review, on municipal data and statistics, on park development and maintenance, on fire protection, on water-works, on water supply, on sewerage and sanitation, on city government and legislation and on disposition of garbage and street cleaning will be made by C. C. Brown; R. W. Ball, City Engineer, Henderson, Ky.; C. D. Pollack, Bureau of Highways, New York; J. W. Howard, C.E., New York; A. M. Reynolds, chief engineer Essex county, (N. J.) Park Commission; Alcide Chausse, city architect, Montreal; Morris R. Sherrerd, Department of Public Works, Newark, N. J.; George C. Whipple, C.E., New York; Horace Andrews, C.E., Albany, N. Y.; Lewis L. Tribus, superintendent public works, Richmond Borough, New York.

GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Full details of highway undertakings are given in the Construction Department.]

Bonds Voted.

Big Stone Gap, Va.—City voted \$22,000 bond issue for improving streets, sidewalks and roads.

Jacksonville, Fla.—Duval county voted \$1,000,000 bond issue for road improvements.

Mountain View, Tenn.—City voted \$20,000 bond issue for street and school improvements.

Bonds to Be Voted.

Addington, Okla.—City will vote on \$10,000 bond issue for roads and bridges.
Denton, Tex.—Denton county, Precinct No. 1, will vote on \$300,000 bond issue for road improvements.

Hempstead, Tex.—Waller county, Precinct No. 1, will vote on \$25,000 bond issue for road improvements.

Luverne, Ala.—Crenshaw county votes November 15 on bonds for road improvements.

Sherman, Tex.—City will vote on \$8000 bond issue for street improvements.

Contracts Awarded.

Manchester, Va.—City awarded \$4800 contract for street paving.

Pratt City, Ala.—City awarded \$16,000 contract for sidewalk improvements.

Staunton, Va.—Augusta county awarded contract for construction of four-and-one-half-mile road.

Contracts to Be Awarded.

Bristol, Tenn.—Sullivan county opens bids November 15 for grading and macadamizing 60 miles of road.

Crowley, La.—Acadia parish appropriated \$3000 to construct road.

Lynchburg, Va.—City and Campbell county will soon award paving and macadamizing contract.

New Decatur, Ala.—City opens bids November 9 for sidewalk paving.

North Birmingham, Ala.—City opens bids November 19 for grading, macadamizing, laying concrete sidewalks, etc.

Oklahoma City, Okla.—City opens bids November 8 for constructing sidewalks.

Pine Bluff, Ark.—Jefferson county plans to construct 25-mile macadam road.

Paducah, Ky.—City opens bids November 23 for 96,500 square feet concrete sidewalks, 17,620 linear feet granite curbing, 17,620 linear feet concrete gutter, 1250 square feet concrete driveways, 1700 linear feet cast-iron drain pipe.

CAPITAL-TO-CAPITAL ROUTE.

Much of It in the South in Permanent Shape.

[Special Cor. Manufacturers' Record.]

Durham, N. C., October 30.

Secretary Frank Weldon of the Capital Highway Commission of Atlanta is in Durham for a week and has received some handsome contributions to aid him in bringing the capital-to-capital route through Durham.

Mr. Weldon took a spin Friday upon the Alston road, which shortens the route 18 miles, running by way of Oxford, Raleigh, Leesville and Apex. The Durham County Commissioners are macadamizing that end of the county at a rate of one mile a month and will double the force this fall. This road will be complete, and the capital-to-capital course will have a straight shoot of 32 miles through Durham, while the county will be the possessor of 100 miles of macadam.

Durham is but a spurt along the way,

however, but Mr. Weldon says that 75 per cent. of the mileage south of Richmond is in permanent shape for the great highway, and that all of that route lies in a sand-clay or a gravel belt which makes possible the permanency of an all-year turnpike at a cost not to exceed \$500 a mile. But two counties now stand in the way of complete development—one in North Carolina and one in Virginia. The popular subscriptions for the work are meant to cover these two, while there is a strong hope that with greater publicity and good personal work the Commissioners of each county will enter the list of counties building this wonderful way South.

The secretary and Mr. Leonard Tufts were here this week going over the Durham-Granville road, a macadam that is soon to join Oxford to Durham, 36 miles apart. The Granville Commissioners are building to the Durham line and Durham is almost there from this end. These expensive investments is a dream soon to crystallize, its promoters believe, into an enduring passage from one end of the country to another, and are expected to set a fast pace for the other counties. Mr. Weldon says that Mr. Tufts, the president, has already given \$5000 to the road and stands ready to put up \$5000 more. From more than one wealthy Durhamite he has secured substantial contributions, and a project is now on foot to have a newspaper junket along this line, showing just what shape the capital highway is in to date.

All of the newspapers are giving liberally of their editorial columns and stirring up a road interest that never has been known. The tobacco men, seeing 2,500,000 extra pounds come into Durham by reason of a single route, have behind them the entire Board of Trade.

W. T. BOST.

Alabama Counties Organizing.

The Alabama Good-Roads Association at its recent meeting made an earnest appeal and adopted the strongest resolutions possible in favor of the organization of good-roads associations in the counties. Already fruits of this resolution and meeting are being seen; Butler county has organized an enthusiastic and strong association. The good-roads advocates of Jefferson county have called a meeting for November 8, when an active and enthusiastic association will be organized and steps taken to secure issuance of a million-dollar bond to build good roads in this county. Secretary J. A. Rountree of the Alabama Good-Roads Association is in receipt of letters from the good-roads advocates and delegates from Calhoun, Shelby and Cullman counties stating that they would take active steps to organize a good-roads association in their respective counties. Vice-President W. T. Brown of the Seventh congressional district writes that he will take steps and assist in organizing good roads in every county in the seventh district. Vice-President J. T. Fain of the fourth congressional district writes that active steps will be taken in the fourth district.

Progressive Big Stone Gap.

John W. Chalkley, Big Stone Gap, Va., writes to the MANUFACTURERS' RECORD: "The town of Big Stone Gap on the 26th ult. voted \$30,000 of bonds to be applied as follows:

"Twenty-two thousand dollars, to be supplemented in part by local assessment, to build roads, streets, sidewalks and one steel or iron bridge about 70 feet long.

The town will buy a 10-ton roller and a rock crusher of good capacity, and will use limestone rock entirely, with the probable addition of some tar or other binder. We have an abundance of limestone rock of easy access. Will make a considerable amount of sidewalk in residence portions of fine limestone and a few squares in business section of granolithic sidewalk. The main purpose, however, is the construction of from five to seven miles of good limestone macadam road about 15 feet wide, running entirely through the corporate limits of the town in two different directions to connect with roads expected to be built next year by the county. The town has within the last 18 months constructed about two miles of very difficult road through a pass in Stone or Cumberland Mountain along Powells River by using misdemeanor convict labor, eliminating three railroad grade crossings and several steep grades, putting the new road on a grade of less than 2 per cent. This road will be macadamized, and will make the historic Gap road one of the prettiest scenic driveways in the whole country. The grading on all of this road work is already done. The town will probably supply the crushed limestone rock and let the work of laying the rock and making the road to contract. The bonds will have to be sold, and it is probable that the work will not be begun before the early part of next year. Horace E. Fox is the town's engineer, and will be in charge of the work. W. H. Horton is Mayor, and the street committee of the council is John W. Chalkley, chairman; L. O. Pettit and J. E. Salsbury. The town recorder and clerk is J. S. Wright. Any of these gentlemen will be glad to give information.

"Of the other bonds, \$4000 are for sewers, to be supplemented by local assessment; this to build a main sewerage line about 3000 feet long, and \$4000 are for jail, fire apparatus house and Mayor's courtroom. Plans have been prepared for this building, which will be of concrete or concrete block construction, with accommodations for about 40 prisoners, to be used for our local needs and the needs of the Federal court when in session here.

"The town will in a short time offer for sale the \$30,000 of 5 per cent. 30-year municipal bonds."

Big Things at Tulsa.

Mr. E. T. Tucker, corresponding secretary of the Commercial Club of Tulsa, Okla., informs the MANUFACTURERS' RECORD that Tulsa county has just voted \$400,000 of good-roads bonds and \$75,000 of county-bridge bonds. These sums will be supplemented from time to time by the issue of \$3 road-district bonds for each dollar of county bonds used in road construction. The aggregate good-roads investment throughout the county will thus aggregate \$1,000,000 when the system shall have been completed. W. L. North, chairman Board of County Commissioners, Tulsa, can give desired information.

The city has awarded contracts for \$460,000 street-paving asphalt and sewer construction, work to commence at once. Additional contracts will be let from time to time, the City Auditor having the petitions on file.

Good for Florida.

The vote last week, by a ratio of three to one, of a million-dollar good-roads bond issue by Duval county, Florida, of which Jacksonville is the seat, is a striking indication of the trend of progress in the State.

Virginians of Fairfax county have organized a good-roads association with W. W. Long president and Joseph Berry secretary and treasurer.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

MANUFACTURERS, AWAKE!

A Practical Business Suggestion for Cotton Mill Men.

[Written for the Manufacturers' Record.]

Cotton manufacturers declare their inability to keep up with the present high price of cotton; hence in some quarters mills have been put on shorter time and with the possibility ahead of closing down altogether. This is due, they say, to the refusal of the public to pay a higher price for cotton goods. Some of the Southern mills have started an experimental movement to import Indian cotton, which, until the price is raised, can probably be laid down at their doors at a lower price than they have been paying for a better grade of the Southern staple.

To the average man who has long ago recognized that, with the prosperity of the country, and I was almost going to say "for" the prosperity of the country, coincident with its development, a higher price for every commodity must be paid, this appears to be an anomalous situation. That an industry that stands for progress from every manufacturing standpoint, certainly so far as Southern mills are concerned, having become modernized to the highest degree, should be unable to obtain what, in the light of increased cost, should be a fair price for its product is almost past comprehension.

Other manufacturers figure the cost of raw material, their manufacturing and overhead expenses, and send their salesmen on the road to quote prices they are to get after figuring a fair profit, and this is done with a pretty generally understood idea that the man who wants to buy will either pay that price or go without. But the cotton manufacturer approaches the situation from an altogether different standpoint. He directs his energies, time and influence to an effort to convince the farmer that he is expecting too much for his crop, and that if he persists he will kill the goose that lays the golden egg. The farmer doesn't agree because he knows he is paying more for everything he gets, from labor up, than ever in the past, and he knows that cotton at 14 or 15 cents doesn't mean any more to him than it did a few years ago at 9 or 10 cents. So there is a situation created which bids fair, if the present attitude is maintained, to affect seriously an industry upon which the South and the country has leaned as upon one of the bulwarks of commercial growth.

Wouldn't it be wise for the cotton manufacturer, in recognition of a fact which the whole world knows, that the farmer is right in expecting a higher price for his crop, and that as he prospers the country will prosper, which is a law almost as old as gravitation, to take account of the reasons that prevent a higher price being paid for cotton goods? Some mills already see the handwriting on the wall. The time is coming, and rapidly, when if cotton mills are to grow in keeping with the demands of modern commercial methods they will have to adopt a different plan of selling their product. They will deal with people who come in touch directly with the public instead of pursuing methods that might have been wise "before the War," but are now enigmas to

those of us of today who are not cotton manufacturers.

What is to prevent a mill that turns out a product which the owner knows is a little bit better than the other fellow's, or has some striking point of difference that should command attention, going directly before the public with advertisements of his particular design or pattern or grade and sending his salesmen on the road to convince the jobber, or the department store if necessary, that his goods are not ordinary cotton prints, but are manufactured under conditions of hygiene and sanitation with dyes that make them worth more than somebody else's goods?

To anyone considering the knit-goods industry the difference is marked at once, and the principal point of difference is in the selling. A recent letter received from a knitting corporation that has been formed for the manufacture of knit goods states that the prospect has never been as bright for a concern in its line, and because of the high price of cotton it expects and demands a higher price for its product, with a ratio of profit increased proportionately.

These things are worth thinking over.

FRANK GOULD.

The Saxony Spinning Co.

The Saxony Spinning Co. of Lincoln, N. C., is progressing with the construction of the buildings for its plant, previously reported. It is erecting a one-story brick main building 75x316 feet, with picker, engine and boiler rooms adjoining, a cotton warehouse of brick, 40x100 feet, and 30 one-story cottages for operatives. The initial equipment will be 5760 spindles, planned for increasing to 10,000 spindles in future, driven by steam power. Stuart W. Cramer of Charlotte, N. C., is the engineer in charge, and all contracts have been awarded. The company has an authorized capital of \$200,000, and James Lee Love is treasurer. Edgar Love, formerly of the Daniel Manufacturing Co., is president.

The Mays Hosiery Mills.

The Mays Hosiery Mills of Nashville, Tenn. (reported incorporated last week with capital stock of \$60,000) has organized with Jacob Mays, president, and Julius W. Martin, secretary-treasurer. This company succeeds the Rock City Hosiery Mills, and is now erecting buildings for a modern plant. It will operate about 300 knitting machines, 25 sewing machines, etc., for a daily output of 1000 dozen pairs of hose. The buildings will include a main structure 60x225 feet, two stories high; a one-story dyehouse 60x225 feet, and a one-story outhouse, storage and boiler rooms 50x100 feet.

The Canton Cotton Mills.

The Canton (Ga.) Cotton Mills will build an addition, as reported lately. This company will erect a 127x300-foot building and install about 10,000 spindles, 274 looms, 54 cards, etc., and all contracts have been awarded. Stuart W. Cramer of Charlotte, N. C., is the engineer in charge. The Woonsocket (R. I.) Machine Co. is furnishing the fly frames, and the Whitin Machine Works of Whitinsville, Mass., is furnishing the spindles, looms, cards and drawing. About \$250,000 will be the cost of the improvements.

The Knitting Mills Corporation.

The Knitting Mills Corporation of Norfolk, Va., has purchased a complete plant, including sufficient floor space to double present capacity. It has a brick building and equipment for a daily output of 200 knit garments. The plant will be driven by electric power and employ 100 operatives, beginning operations next month.

This company was reported incorporated last week with a capital stock of \$25,000. G. P. Peed is president.

The Bell Hosiery Mills.

The Bell Hosiery Mills of Suffolk, Va., has begun the erection of a main brick building 40x100 feet and an engine-boiler room 18x20 feet. It will install 12 ribbers, 12 footers, hosiery drier, 40-horsepower boiler, 20-horsepower engine, 140-light electric equipment, etc. This company was reported incorporated several weeks ago, and it has a capital of \$10,000.

The Osage Manufacturing Co.

The Slater Manufacturing Co. of Bessemer City, N. C., has changed its name to the Osage Manufacturing Co. and ordered 400 additional looms. This company has been operating 15,216 spindles and 400 looms on madras and yarn production.

Adding 2000 Spindles.

The Flint Manufacturing Co. of Gastonia, N. C., has ordered and begun the installation of 2000 spindles additional. This company has been operating 5500 ring spindles, etc., and has space for 10,000 spindles.

The Lafollette Hosiery Mills.

Messrs. K. M. Lafollette, H. M. Lafollette, A. J. Carr, T. C. Mitchell and H. M. Delius have incorporated the Lafollette Hosiery Mills of Lafollette, Tenn. This company has a capital stock of \$25,000.

The Asheville Quilt Mills.

Messrs. J. A. Martin of Hickory, N. C.; John H. Carter and J. G. Merrimon of Asheville, N. C., have incorporated the Asheville Quilt Mills. This company has a capital stock of \$150,000.

Textile Notes.

Reports state that Scanlon Bros. of Morrilton, Ark., will incorporate and enlarge their woolen mill.

The Kerr Bleaching and Finishing Works of Concord, N. C., has increased capital stock from \$25,000 to \$45,000.

The Magnolia Mills Co. of Concord, N. C., will build an addition, as reported recently, but will not add any machinery. This addition will be 56x75 feet, and will provide more space for present equipment.

The Greenwood (S. C.) Cotton Mills will, it is reported, install additional machinery in No. 2 mill. This company is now operating 30,000 ring spindles and 700 broad looms.

The Orr Cotton Mills of Anderson, S. C., will, it is reported, expend \$40,000 for machinery to change production to fine cloth. This company now has 57,496 ring spindles and 1504 looms, producing sheeting, shirting and print cloth.

Mr. T. W. Larkin, secretary of the Chamber of Commerce of Beaumont and chairman of the good-roads committee of the Texas Commercial Secretaries' Association, is devoting much attention to the effort of the association to gather complete statistics of the progress of highway improvement in the State.

The Inland Interstate Waterways Association, in session at Corpus Christi, Tex., elected Messrs. C. S. E. Holland of Victoria, Tex., president; Henri Gueydan of Gueydan, La., and G. J. Palmer of Houston, Tex., vice-presidents, and Leon Locke of Lake Charles, La., secretary.

The State Department of Mines of West Virginia reports that during the year ended June 30 last 41,851,403 long tons of coal were mined, an increase over 1908 of 2,484,393 tons.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

FRISCO'S ANNUAL.

A Year of Progress on the System—Many New Industries Established.

The thirteenth annual report of the St. Louis & San Francisco Railroad Co., covering the fiscal year ended June 30, 1909, shows operating revenue \$38,195,737, increase as compared with the previous year \$2,389,605, or 6.7 per cent.; operating expenses \$25,164,014, increase \$156,728; net operating revenue \$13,031,723, increase \$2,232,876, or 20.7 per cent. Taxes amounted to \$1,544,604, which, being deducted, left \$11,487,119. Adding to this miscellaneous income, amounting to \$1,409,792, made the total income \$12,896,911. After the deduction of interest, rentals and other fixed charges, amounting to \$11,568,325, there was left a net income after providing for all charges of \$1,328,585. Out of this there were dividends paid of 4 per cent. on the first preferred stock, leaving a surplus carried to profit and loss of \$1,128,843.

The total mileage operated is 5253 miles, being an increase of 180 miles, due to taking over from construction of the Beaumont, Sour Lake & Western Railway 117 miles, the Orange & Northwestern Railroad 61 miles and the Carrollton-Irving cutoff 11 miles. A trackage agreement February 15, 1909, was made with the Louisiana Railway & Navigation Co. for trackage rights between Baton Rouge and New Orleans, La., 77 miles, which will give the company a short route between Houston, Tex., and New Orleans, La. The most important addition to the property was the new engine and car shops at Springfield, Mo., which were completed at the close of the fiscal year and placed in operation on July 5.

The report of the industrial department shows a very satisfactory increase in the number of industrial plants located during the year along the lines. There were thus located 327 industries, employing more than 8700 men and costing \$7,330,500. It is estimated that these industries will load in and out more than 80,000 carloads per year.

The total assets of the system are \$321,467,282, including the franchises and properties of the company at \$190,601,738. The total capital assets are \$294,164,294 and current assets \$21,337,737. There was no change in the capital stock issued and outstanding.

The report of the Chicago & Eastern Illinois Railroad, part of the Frisco System, shows, in addition to the foregoing, for the year total operating revenue \$10,269,618, decrease \$473,112, or 4.4 per cent.; operating expenses \$6,934,533, decrease \$420,258; net operating revenue \$3,335,085, decrease \$52,853, or 1.6 per cent.; operating income after the payment of taxes, \$3,060,970; total income, \$3,646,574; net income after providing for all charges, \$695,170; surplus for the year after the payment of dividends, \$20,972.

The report of the Evansville & Terra Haute Railroad, including the Evansville & Indianapolis Railroad, also in the system, shows total operating revenue \$2,093,997, decrease \$110,072; total operating expenses \$1,321,964, decrease \$67,758; net operating revenue \$772,032, decrease \$42,213; operating income after payment of taxes \$661,890, decrease \$48,177; total income \$777,874, decrease \$213,286; surplus after providing for all charges \$175,116, decrease \$223,996.

The Seaboard Air Line Railway will be turned over to the stockholders by the

receivers at midnight on November 4. As soon thereafter as possible the company will be reorganized and officers elected.

New Lines Recently Chartered.

Among the new lines recently reported as contemplating construction are the following:

St. Louis & Oklahoma Railway Co., chartered in Oklahoma, with headquarters at Bromide, in Coal county, to build a line 300 miles long from Salisaw through Sequoyah, Haskell, Pittsburg, Coal, Johnston, Murray, Carter, Garvin, Stephens, Jackson and Greer counties to a point between the Red River and the Salt Fork of the Red River; estimated cost \$15,000 per mile. The incorporators are O. E. Snyder, Erie, Kans.; J. D. Cameron, Kansas City, Mo.; E. S. Brodie, St. Louis, Mo.; J. M. Sholl, Joplin, Mo.; E. T. Brown, Coalgate, Okla., and E. W. H. Jackson, Bromide, Okla.

St. Louis-Kansas City Electric Railway Co., incorporated at Jefferson City, Mo., to build a high-speed double-track line 250 miles long from St. Louis to Kansas City, Mo., with a branch 40 miles long from Glasgow via Charlton to Brookfield, Mo. The road is to be without grades or curves; capital stock \$5,000,000. The line will run through St. Louis, St. Charles, Lincoln, Warren, Montgomery, Calloway, Boone, Howard, Saline, Lafayette and Jackson counties. It is said that the organizers have been negotiating with an English syndicate for financing the project, and arrangements have been made for preliminary funds. The directors are D. C. Nevins and Charles A. Loomis, Kansas City; H. V. Johnson, W. Weston and B. L. Dorsey, Denver; J. H. Reeder and H. E. Insley, Kansas City; W. A. Hamilton, Chicago; L. M. Nevins and Selden P. Spencer, St. Louis; George A. Anderson, Denver; W. H. Griffiths, Hays, Kans.; W. B. Cawthorn, Columbia, Mo., and Randall B. Young, Kansas City. Messrs. Loomis, Reeder, Insley, Anderson and D. C. Nevins hold 500 shares each.

Tennessee Traction Co., chartered at Memphis, Tenn., to build a line from Memphis via Jackson to Nashville, Tenn., about 190 miles; capital \$50,000. Gasoline motor cars may be used. Survey is to be made immediately. George E. Bushnell, consulting engineer, Indianapolis, Ind., who promoted the plan, heads the list of incorporators, the others being W. K. Burton, Horace N. Smith, W. B. Gilbert, Sam R. Walker, J. H. Smith, R. A. Godwin, W. P. Holliday and C. B. Frazer.

Carolina Traction Co., charter applied for in South Carolina to build electric railways for a distance of 30 miles in any direction out of Rock Hill, S. C. It is first proposed to build from Rock Hill to Charlotte, N. C., and also from Rock Hill to a point on the Seaboard Air Line in Rossville township of Chester county; capital \$150,000 to \$500,000. The incorporators are J. M. Cherry of Rock Hill, W. S. Lee of the Southern Power Co. and George Stephens of the American Trust Co., both at Charlotte, N. C.

New Equipment, Rails, Etc.

The Atlanta, Birmingham & Atlantic Railroad has ordered six American type passenger locomotives from the Baldwin Locomotive Works, Philadelphia; three baggage and express cars 61 feet long from the Hicks Locomotive and Car Works, Chicago; 25 stock cars 41 feet long from the American Car & Foundry Co., St. Louis, and 2745 tons of 80-pound steel rail from the Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.

The Carolina, Clinchfield & Ohio Railway is receiving propositions on 10 heavy Mallet locomotives, 3 passenger locomotives and 12 first-class passenger coaches.

Order has not been placed for any of this equipment as yet.

The Chesapeake & Ohio Railway has not recently made any arrangements to purchase either locomotives, cars or rails. This denies a recent press report.

The Pennsylvania Railroad has received the first of its electric locomotives to be used on the New York tunnel extension. It weighs 330,000 pounds, and will develop 4000 horse-power, or about three times as much as the largest steam freight locomotive. It could pull a heavy freight train at the rate of 60 or 70 miles per hour. The driving wheels (eight in number) are 68 inches in diameter. The electric machinery of the locomotives was built by the Westinghouse Electric & Manufacturing Co. of Pittsburgh, and the other mechanism was constructed at the locomotive works of the Pennsylvania Railroad. A press report that the Pennsylvania Railroad was in the market for cars is officially denied.

The Baltimore & Ohio Railroad Co. has ordered 2400 steel hopper coal cars from the Standard Steel Car Co., Butler, Pa.; 1000 steel hopper coal cars from the Cambria Steel Co., Cambria, Pa., and 1000 steel underframe box cars from the American Car & Foundry Co., St. Louis. These contracts amount to about \$4,500,000, and complete the addition of 10,000 new cars of the largest capacity to the company's freight equipment. Delivery on former orders of this increase will begin this month.

The Southern Railway Co. has bought from the General Electric Co., Schenectady, N. Y., two of the largest type of gas-electric motor cars. The contract was given after a thorough test between Manassas and Strasburg, Va., last summer. The car bodies will be of steel, about 55 feet long, and will seat 52 passengers. Entrances are provided at the centers as well as at the ends, and each car has a motor capacity of 200 horse-power. The General Electric Co. has also completed a single-truck car for the Third Avenue Railway Co., New York, this vehicle being driven by an enclosed gas engine mounted between the axles. The car can scarcely be distinguished from an ordinary electric car. It is 28 feet long, and seats 26 people. It weighs 12 tons.

The Norfolk & Southern Railway is reported in the market for 300 freight cars of from 30 to 40 tons capacity.

The Southern Railway, it is reported, has ordered 200 stock cars of 30 tons each from the Lenoir Car Works, Lenoir City, Tenn.

The Illinois Central Railroad is reported to have placed a large rail order with the Illinois Steel Co., Chicago.

The Denison & Sherman Traction Co., Denison, Tex., it is reported, has ordered two cars from the American Car Co., St. Louis.

The Kansas City Belt Railway is reported to have ordered six switch locomotives from the Baldwin Works.

The Beaumont-Texas Traction Co. is reported in the market for three or four double-truck semi-convertible cars.

The Chicago & Alton Railroad, according to a dispatch, has ordered three Mallet compound locomotives from the American Locomotive Co., New York.

The Missouri, Kansas & Texas Railway is reported contemplating placing a locomotive order.

Baltimore & Ohio Annual Report.

The Baltimore & Ohio Railroad Co.'s annual report, which is the eighty-third of that corporation, covers the fiscal year ended June 30, 1909, and shows gross earnings \$71,043,519, decrease as compared with the preceding year \$2,565,261; total expenses \$47,551,976, decrease \$6,

598,903; net earnings from operation \$23,491,542, increase \$4,033,641; percentage of expenses to earnings 66.93, decrease 0.64 per cent. The earnings of lines controlled by or affiliated in interest with the Baltimore & Ohio Railroad system are as follows: Earnings, \$5,369,337; expenses, \$3,612,004; net earnings from operation, \$1,757,332; increase as compared with 1908, \$41,989; average percentage of expenses to earnings 67.27. The lines covered by the latter are the Valley Railroad of Virginia, the Ravenswood, Spencer & Glenville Railroad, the Cleveland Terminal & Valley Railroad, the Cleveland, Lorain & Wheeling Railway and the Ohio & Little Kanawha Railroad.

It is noted that the first five months of the fiscal year showed a decrease in earnings of \$6,277,850, but the latter part of the year showed an increase of \$3,712,588.

Concerning the deal for the Cincinnati, Hamilton & Dayton Railway, the report says that the negotiations concluded provide that the Baltimore & Ohio will acquire at the expiration of seven years, at a price then to be agreed upon or determined by arbitration, the controlling stock of the line. In this connection a plan was effected for adjustment of future interest charges and the payment or adjustment of the floating debt of the Cincinnati, Hamilton & Dayton Railway, and providing approximately \$7,000,000 for improvements and working capital.

The total assets of the Baltimore & Ohio Railroad Co. are \$523,599,473, including the cost of the road at \$175,390,425. The total capital assets are \$410,606,478 and the current assets \$64,683,431. The capital stock of the company amounts to \$60,000,000 of preferred and \$152,175,829 of common.

Magnolia to Hope, Ark.

President S. Q. Sevier of the Gulf & Magnolia Northern Railroad Co., Hope, Ark., writes that the line to be built is 35 miles long from Magnolia to Hope via Waldo and Bodcaw, Ark. There will be no bridges, but 3000 feet of ordinary trestling will be required over Bodcaw and Dorcheat creeks. The country is high, slightly rolling and well drained. The line traverses the divide between the Ouachita River and the Red River. G. H. Cravens of De Queen, Ark., is engineer in charge. Dates have not yet been set to receive bids for construction and equipment, but the company is working out details preparatory to beginning construction, which it is hoped to start by January 1. Connections will be made as follows: At Magnolia with the Louisiana & Northwestern Railway, at Waldo with the St. Louis Southwestern Railway, at Hope with the St. Louis, Iron Mountain & Southern Railroad, the St. Louis & San Francisco Railroad, the Louisiana & Arkansas Railway and the Arkansas & Louisiana Railway.

The directors are S. Q. Sevier, president; J. H. Betts, vice-president; R. L. Pritchard, secretary, Hope, Ark.; J. L. Davis, treasurer, Magnolia, Ark.; F. S. Quinn, Texarkana, Ark.; P. A. Tharp, W. Y. Foster of Hope, Ark.; Charles Clark and C. A. Kennedy of Waldo, Ark.; J. M. Witt and Henry Stevens of Magnolia, Ark.

Galveston-Houston Interurban.

D. P. Robinson, general manager of the Stone & Webster Engineering Corporation, 147 Milk street, Boston, Mass., writes that the Galveston-Houston (Texas) station will be approximately of 1500 kilowatts capacity. Specifications have not been drawn up yet nor has any date been set to open bids for equipment.

This station will be the main power equipment of the Galveston-Houston Elec-

tric Railway, and will be located at Texas City, on the water-front of Galveston Bay, about three miles from the main line of the interurban. The first installation of 1500 kilowatts will consist of turbo-generators of 1000 kilowatts and 500 kilowatts capacity.

The road, as its name implies, is to be an interurban railway connecting Galveston and Houston, Texas. The line between city limits will be about 45 miles long, entirely on private right of way. The track will consist of 80-pound T-rail laid on treated ties, and the roadbed will be ballasted throughout with shell or gravel ballast.

The road will be operated from 600-volt direct-current overhead trolley, using catenary suspension, and current will be provided from four substations located about 10 miles apart. Current will be brought from the main power station over a three-phase 60-cycle transmission line at about 30,000 volts and stepped down through suitable transformers located in the substations.

The running time between city limits will be about one hour and 10 minutes. At Galveston the cars will operate over the tracks of the Galveston Electric Co., a distance of about three and one-half miles, and at Houston over the tracks of the Houston Electric Co. for about the same distance.

Oklahoma & Golden City Railroad.

The Oklahoma & Golden City Railroad Co., says an officer, will receive bids not later than January for its proposed line from Fairview, Okla., to Jefferson City, Mo., 300 miles, via Enid, Pawhuska, Joplin, Golden City and Climax Springs; also a branch from Climax Springs south to Springfield, Mo., 70 miles. Engineering work is partially done and part of the line has also been definitely located. J. W. Fewell of Golden City, Mo., is engineer in charge. There will be five large bridges, besides a number of small ones.

Connections will be made with the Kansas City, Mexico & Orient Railway at Fairview, with the Chicago & Alton at Jefferson City, with the Missouri, Kansas & Texas at Pawhuska, with 11 roads entering Enid, with all at Joplin and Carthage, the Frisco at Golden City and other points and the Rock Island at Eldon. The country is devoted to agriculture and mining, and is fairly level.

John A. Griesel of Golden City, Mo., is general manager, and among others interested are C. E. Hogarty of Brooklyn, N. Y.; A. J. Bauer of Jefferson City, Mo.; A. S. Vaughn of Pittsburg, Pa.; J. W. Fewell, Fremont, Ohio; Charles T. Johnson, Washington, D. C.; Walter Bray of Springfield, Mo.; H. L. Pease of Climax Springs, Mo. The main line will be 300 miles long and the branch 70 miles long.

Abilene Short Line.

The Abilene Short Line Railroad is a new plan reported, H. J. Bradshaw, civil engineer, writes from Abilene, Tex., that an organization has not yet been perfected, but the merchants and bankers of that place who are backing the enterprise think favorably of forming a construction company and margining the proposition sufficiently for it to stand on its own merits. The purpose of building the railroad is to connect Abilene with a very fine section of country southeast thereof, and also to give the city another outlet by connection with one of three large railroad systems in the same direction. He further says that a large part of the money necessary to build the railroad will be provided by Abilene people, but the credit of the proposition will be used to obtain the rest for completing the line, which will be about 85 miles long and will tap a country esti-

mated to yield at least \$4000 per mile in freight earnings from the beginning. The country is very rich and will sustain a dense population producing freights to rapidly increase the earnings. Excepting for about 10 miles the distance is practically level, and where it is not so the country is only comparatively rough. A first-class railroad with light grades and easy curves will be constructed. The approximate cost of the line is \$18,000 per mile, including a handsome depot and suitable roundhouse at Aberdeen.

Gasoline Cars Contemplated.

Plans are reported under way at Leesburg, Va., to acquire from the Southern Railway the line known as the Bluemont division and to operate it with gasoline motor cars. Among those who are reported interested in the movement are E. B. White, president of the People's National Bank at Leesburg, and Robert B. Walker, vice-president of the same institution. Other men of capital are also reported concerned. The Bluemont division is 59 miles long from Washington via Alexandria to Bluemont, Va. Leesburg is 42 miles from Washington. In order to avoid terminal expenses it is contemplated if the road changes hands to have the cars (instead of using the union station) to enter Washington either over the Washington Southern lines at 7th Street Station or over the Washington, Arlington & Falls Church road. As yet no proposition has been made to the Southern Railway.

Short Receivership Expected.

George T. Bishop of Cleveland and Geo. Weems Williams of Baltimore have been appointed receivers for the Washington, Baltimore & Annapolis Electric Railway Co., which operates a high-speed double-track line between Baltimore and Washington, with a branch to Annapolis. Mr. Bishop is president of the company and Mr. Williams is its counsel. The receivership, which is expected to be short, is the result of inability to meet the interest on the bonds, but it is stated as soon as the proposed change in the method of operating is accomplished the road will be on a good basis. By February 15 it is hoped that the direct current instead of alternating current will be in use. The company is also purchasing new equipment made necessary by the extension of its line across Washington city to a point near the Treasury Building. Meanwhile the line will be operated as usual.

Mangum to Elk City.

Concerning the extension of the Wichita Falls & Northwestern Railway from Mangum to Elk City, Okla., 40 miles, an officer writes that the company is letting contracts by miles for grading, but that it does its own bridging and tracklaying. The line is over rolling and broken prairie country. There will be two trestles of 800 feet and a number of smaller timber bridges. Connection will be made with the Chicago, Rock Island & Pacific Railway at Mangum, Okla. R. A. Thompson, Wichita Falls, Texas, is engineer in charge. The other officers of the line are: J. A. Kept, president; Frank Kell, vice-president and general manager; Thomas R. T. Orth, general superintendent, all at Wichita Falls.

A Tennessee Electric Plan.

W. C. Frost, Nashville, Tenn., writes that he represents a constituency of three counties (Bedford, Lincoln and Moore) who are anxious to have an electric railway built between Shelbyville and Fayetteville, Tenn., 30 miles, through a rich and prosperous country. There is no competing railroad and 75 per cent. of grading

is now done. This right of way is offered and they also propose to take \$100,000 in stock. Mr. Frost desires to get in communication with railroad builders who might be interested in the proposition. He also says that a competent engineer who did the grading estimates that it will cost only \$200,000 to build the line.

Clinchfield at Spartanburg.

The Carolina, Clinchfield & Ohio Railway operated its first train into Spartanburg, S. C., on October 28, carrying a big excursion from various points along the line, and the next day a celebration was held in honor of the advent of the road, which has just been completed. It is estimated that 800 persons arrived on the train, and they were welcomed by a crowd of several thousands. The festivities were held at the fair grounds and lasted practically all day. This completion of the road makes a line 243 miles long from Dante, Va., via Johnson City, Tenn., and Marion, N. C., to Spartanburg.

Cincinnati to Pittsburg.

The Cincinnati, Portsmouth, Pomeroy & Pittsburg Electric Railway Co., A. E. Cox, trustee, Huntington, W. Va., contemplates, according to a letter received by the MANUFACTURERS' RECORD, building an electric railway from Cincinnati to Pittsburg along the Ohio River Valley. Rights of way are being secured, and at present more than 200 miles have been acquired out of a total of 466 miles. It is expected to obtain the rest of the right of way by January and to begin construction early next spring.

Clifton Forge to Keyser.

A report from Monterey, Va., says that survey has begun for the proposed railroad which is to run from Clifton Forge, on the Chesapeake & Ohio Railway, to Keyser, W. Va., on the Baltimore & Ohio Railroad, about 160 miles. J. J. Stoutenburg of Hot Springs, Va., organized an engineering corps, headed by Henry A. Slaven of Monterey, and the work is to be pushed. In addition to others previously reported as interested in the line is B. H. Hiner of Franklin, Va.

Helena Interurban Railway.

The Interurban Railway, Helena, Ark., proposes to build at present only four miles of line from Helena to West Helena. This will require two wooden bridges, each 26 feet long. The country is hilly. R. L. Leonard has the contract for earthwork and C. H. Purvis is engineer in charge, both at Helena, Ark. Connections will be made with the Missouri & North Arkansas Railroad and the Missouri Pacific Railway. E. C. Horner is president and John S. Horner, secretary and treasurer.

The Key West Extension.

An officer of the Florida East Coast Railway, with reference to the damage by the September hurricane to the Key West extension, is quoted as saying that the line to Knights Key will be open early this month, and that no damage was caused to the permanent work.

Bought a Railroad.

It is announced at Norfolk, Va., that the John L. Roper Lumber Co., which is controlled by the Norfolk & Southern Railway, has purchased the Kinston & Carolina Railroad & Lumber Co., which has a line 25 miles long from Kinston to Pink Hill, N. C.

Birmingham to Bessemer.

Dispatches from Birmingham say that right of way from Birmingham to Bessemer, 12 miles, has been secured by the Atlanta, Birmingham & Atlantic Railway,

and construction on the extension will begin immediately; furthermore, that 15 acres of land at the outskirts of the city have been acquired for yards and station purposes. It is hoped to complete the line by March next.

Extension Proposed.

The Raleigh & Southport Railway Co., John A. Mills, president and general manager, Raleigh, N. C., will build an extension of seven miles from Fayetteville to Hope Mills, N. C. Connections may be made with the Aberdeen & Rockfish and the Virginia & Carolina Southern Railroad at Hope Mills. The route is through a rolling country, and the only bridges required will be wooden trestles.

Will Start Work Before January.

A letter from Beaver, Okla., quotes J. M. Kerns of Beaver, general manager of the Beaver Valley & Northwestern Railroad, which is to be built from Gage via Beaver to Hooker, Okla., as saying that active operations will commence before the first of the year. The first section to be constructed is from Hooker to Beaver, 40 miles.

Albany & Northern May Extend.

The Albany & Northern Railroad, a line 35 miles long from Cordele to Albany, Ga., will, according to a report from the first-named place, be extended from Albany to St. Andrews Bay, Fla., on the Gulf of Mexico, a distance of about 200 miles. For several years there have been rumors of an extension of this road.

Oklahoma City's New Terminal.

A dispatch from Oklahoma City, Okla., says that W. S. Tinsman, manager of the Rock Island system at El Reno, Okla., has tentatively approved plans made by City Engineer Burke for the railroads entering Oklahoma City to spend \$3,000,000 for building a union station and new terminal trackage.

Railroad Notes.

The Norfolk & Southern Railway is to be sold at receivers' sale at Norfolk, Va., on December 5.

The Western Maryland Railroad will be sold at receivers' sale in Baltimore on Friday, November 19.

U. H. Broughton has been elected president of the Virginian Railway Co., filling the vacancy caused by the death of H. H. Rogers.

R. S. Lovett has been elected president of the Southern Pacific Railway to fill the vacancy caused by the death of E. H. Harriman. William Mahl, comptroller, was elected vice-president to succeed Mr. Lovett.

Purchases Fertilizer Plant.

Announcement is made that the Atlanta (Ga.) Oil & Fertilizer Co. has purchased the plant of the North Georgia Fertilizer Co. at Rome, and will at once enlarge it to three times its present capacity. It is stated that the company will later erect an oil mill and make other improvements costing approximately \$200,000.

Want Rails for Mexico.

Lauro M. Guerra y Hermoso, Qa D: Nuevo, Mexico, No. 58, City of Mexico, write the MANUFACTURERS' RECORD:

"We are requiring 600 tons of 20-pound rails; c. i. f. Progresso, Yucatan; material must be second-hand, but in good condition."

The American Automobile Association is preparing to hold its national convention at Washington in January.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Buys Timber in Louisiana.

A dispatch from Hackley, La., states that the Armbricht Lumber Co. of Hattiesburg, Miss., and the Flint, Irving & Stone Company of Pittsburg, Pa., have purchased a large tract of timber near Hackley, and will erect a sawmill for its development. Kentwood & Eastern Railroad, it is stated, will be made a standard gauge to Warnerton, La., connecting with the New Orleans Great Northern Railroad, and the purchasers of the timber will construct a narrow-gauge railroad about six miles east of Hackley for logging purposes. It is understood that the companies are to erect a sawmill plant, to be ready for operation by March, 1910, together with an office building and other facilities.

Cypress Lumber Co. Reorganized.

A New Orleans report states that the Opdenweyer-Fischer Lumber Co. has been organized by Frank Opdenweyer, John Opdenweyer and C. J. Fischer to succeed the Opdenweyer Cypress Co., which has operated a plant on the Amity River, near Lake Pontchartrain, for several years. It is stated that the new company has purchased about 120,000,000 feet of standing cypress timber in Tangipahoa and St. Tammany parishes from the Salmen Brick & Lumber Co., which will discontinue the manufacture of cypress lumber and confine its operations to the manufacture of yellow pine. The purchase price is said to be about \$600,000.

Buys Mill and Timber.

A dispatch from Pinebur, Miss., announced the purchase by the Car Dal Lumber Co. of Chicago of the entire holdings at Pinebur of the Walworth & Neville Manufacturing Co. These properties are said to include approximately 30,000,000 feet of standing timber, 500,000 feet of lumber in sheds and on yards, and about 4000 acres of land, together with a sawmill of 40,000 feet daily capacity and other equipment, the consideration being about \$190,000. Officers of the Car Dal Lumber Co. include W. M. Carpenter, Chicago, president; R. H. Proctor, Norfolk, Va., vice-president, and E. S. Hough, Chicago, secretary and treasurer.

Georgia-Florida Sawmill Association.

The regular monthly meeting of the Georgia-Florida Sawmill Association was held in Jacksonville last week, at which routine business was transacted, reports made on market conditions, etc. Members of the association predict a good year for the industry, the announcement being made that several large Eastern companies are endeavoring to make arrangements with manufacturers of lumber for a term of months. The next meeting of the association will be held in Jacksonville on December 14.

Texas Builders' Exchange.

At a meeting of the Texas State Builders' Exchange at Cleburne last week the following officers were elected: J. S. Skirving, San Antonio, president; Frank Hanson, Dallas, vice-president; J. H. Dixon, Cleburne, sergeant-at-arms, and H. C. Opperman, Galveston, secretary-treasurer.

White Oak Wanted.

G. Elias & Bro., 965 Elk street, Buffalo, N. Y., want one carload each of one and one-and-a-quarter-inch firsts and seconds brash (white oak) for export.

A. I. Stephens of Detroit and associates are reported to have purchased a controlling interest in the Cheny Lumber Co. at Monroe, La., for a consideration of \$300,000. It is said to be the purpose of the purchasers to expend approximately \$250,000 for improving present facilities and purchasing more stumpage.

MINING

Pig-Iron in 1908.

In a note to the advance chapter from the United States Geological Survey's "Mineral Resources of the United States" dealing with the production of iron ores, pig-iron and steel in 1908, Dr. William Taylor Thom of the Survey discusses the value of the production of pig-iron in this country in 1908. He presents a table comparing quantities and values in 1907 and 1908 by States, showing an aggregate decrease in 1908 under 1907 in quantity of 9,845,343 long tons and in value of \$275,637,000. He says:

"These two tables speak so plainly for themselves that further comment seems superfluous, unless it be to remark that Alabama, Tennessee and Virginia stood the strain better than other important producing States that depend on outside ores."

Will Handle Own Production.

It is announced that the Pocahontas Consolidated Collieries Co., Isaac T. Mann, president, Switchback, W. Va., and its allied companies have decided to organize a shipping company for the purpose of handling their coal production after April 1, 1910. This is being done, it is stated, on account of a change of policy of the producing companies. The shipping company will probably have offices at Bluefield, W. Va.

Mica Mill in North Carolina.

R. Ed. Holland of Boonford, N. C., writes the MANUFACTURERS' RECORD that he will build a mica mill. He wants to correspond with manufacturers of mica-mill machinery and consumers of milled and sheet mica.

Good Roads Economy.

In an address on fire insurance as a factor in credit Mr. Powell Evans, president of the Merchant & Evans Company, Philadelphia, urging greater regard for petty economies, said:

"A crying need, to my mind, at this time in American life is that of more thriftiness and greater regard for the petty economies in life which go to constitute a healthy and continuously successful people. It is the lack of this spirit in the country which is the father of the whole situation just above discussed."

"It is the lack of this spirit which taxes every individual in the nation, with the result of a rotten road system instead of building good roads, as other civilized nations do."

"I confess to an interest and pleasure in automobiling, even if you class me as either a bankrupt or a millionaire—the classes said to own motor cars—and at any rate as a crank. We motorists yet believe in good roads."

"Finally, it is this spirit in the country which is responsible for the waste in health occasioned by widespread lack of knowledge and interest about how to properly cook the best and cheapest food supply of all lands."

"There is no question about the United States being the greatest country in the world, physically and in the stock and intelligence of its people, but at present we are too busy and successful to give reasonable attention to important small things."

MECHANICAL**Improved Milne Water-Tube Boiler.**

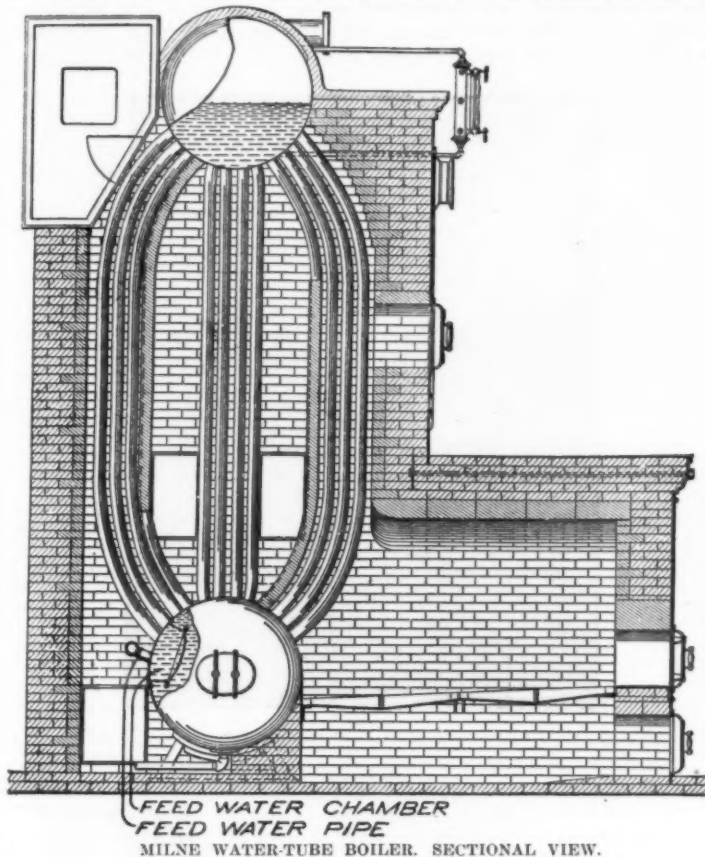
Four accompanying views illustrate the improved Milne water-tube boiler. This boiler consists of an upper and a lower horizontal drum, connected with outer banks of tubes, and an inner bank of tubes between them, so arranged that spaces of suitable width between the banks of tubes

but is precipitated and settles in the large lower drum, where it can be blown out at will.

An interesting feature is the feed chamber, shown in the lower drum. This chamber is usually connected with the two rear rows of tubes, and is closed or sealed against the water in the lower drum, so that the incoming feed water is not mixed with the hot water in the drum, but is forced up by the pressure of the pump

is unknown and dry steam is produced under all varying conditions. With the construction shown, the upper drum is clear of all obstructions and all tube joints are accessible, but in instances where head room is limited a dry-pipe arrangement is applied and the steam outlet placed at the side instead of on top.

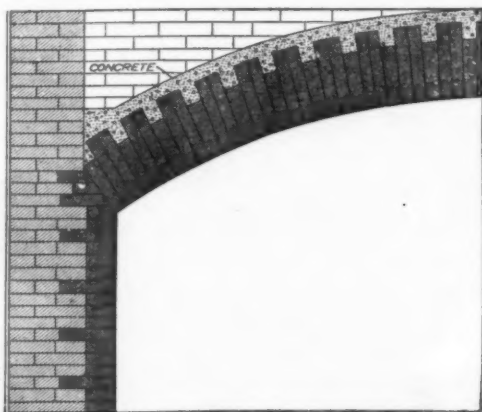
of tubes, the velocity being very rapid on account of the high temperature, the large exposed fire surface and the absence of all restrictions. In the second bank of tubes the circulation is also upward, but with lessened velocity proportionate to the difference of temperature, and in the rear bank of tubes the circulation is downward



MILNE WATER-TUBE BOILER. SECTIONAL VIEW.

provide access for inspection, cleaning and repairs through doors set in masonry adjacent to these spaces. The tubes are all uniformly shaped and are interchangeable. The large radius of curvature permits the use of any of the standard cleaning tools, and the removal of one manhole plate gives access to an entire set of tubes. The tubes stand in vertical staggered effect and are spaced in such a manner that any

through the two rear rows of tubes, and as its passage requires an interval in time of over 10 minutes before it finally enters the upper drum, its temperature is gradually raised to a high point, and the great bulk of the scale-forming matter is precipitated to the chamber below. Another good point about this arrangement is that the cool water (in the two rear rows of tubes connecting with the feed chamber)



MILNE WATER-TUBE BOILER. FURNACE CONSTRUCTION.

of them can be removed and replaced without interference from adjoining tubes or the setting. This arrangement is shown in the illustrations.

It has been found in daily practice, as might naturally be expected, that the tendency for ashes and the dust of combustion to adhere to the exterior surfaces is lessened, and that such accumulations find their way to the rear chamber, being easily removed through the door illustrated. Likewise on the interior of the tubes scale-forming matter does not readily adhere,

coming in contact with the gases on their way to the flue absorbs a great deal of heat which would otherwise be wasted. A proportionate economy of fuel is, therefore, effected.

The water-holding capacity per horsepower is unusually large, which will be apparent when the volume stored in the lower drum is taken into account. The steam-liberating surface is ample, and on account of the evenness of circulation, and the fact that the feed water enters the upper drum at the steaming point, priming

rise upward, flooding the front bank of tubes. A portion of the gases take a horizontal as well as vertical direction, but the baffle tile forces the bulk of the gases upward the full length of the tubes. At the upper drum the gases turn and take a downward direction, thence turning again under the baffle tile in the rear bank of tubes and rising to the outlet.

Circulation is upward in the front bank

through the two rows of tubes not connected with the feed chamber and upward through the tubes that are connected with it.

The construction throughout is simple. No hand-hole plates, headers or flat stayed surfaces exist, and the floor space occupied is comparatively small. The boilers are offered in all sizes from 150 to 1000 horsepower for all pressures. They are manu-

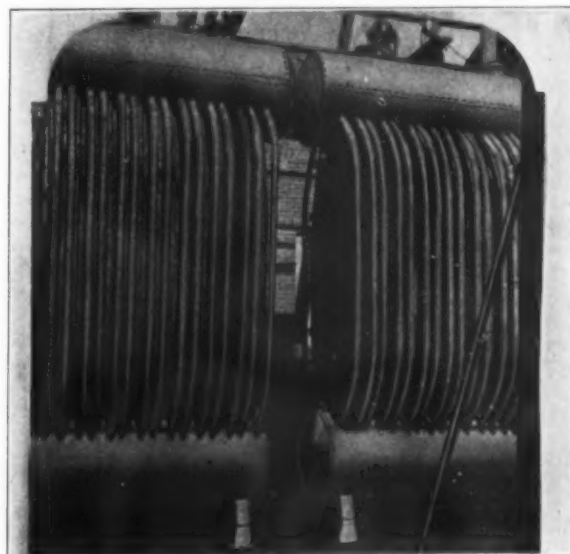
factured by the Milne Water-Tube Boiler Co., 154 Nassau street, New York.

The Windber Wood-Pipe Line.

The wood-pipe line system of conveying water for the Windber Water & Power Co. in Somerset county, Pennsylvania, is an extensive one, and conveys water to a mining operation. The wood pipe used was manufactured by the A. Wyckoff & Son



MILNE WATER-TUBE BOILER AND FURNACE.



MILNE BOILER. ARRANGEMENT OF TUBES.

Company of Elmira, N. Y. It was selected after investigation of the merits of iron and terra-cotta pipe, both as to durability and repair costs. Describing the system, H. G. Bonner of the Windber company writes:

"Work was started on our pipe line from Clear Shade Creek to Windber on August 11, 1908, and the last pipe was laid early in January, 1909. The actual working time was three months and 13 days, as we were delayed at various times by non-

The upper half of the line lies in a very rough country, the entire surface being covered by sand-rock boulders. In some places it was necessary to haul earth from other points on the work to fill in around the pipe. The country over which the lower half of the line is laid is not so rocky, but nearly 7000 feet of this section of the line is laid in swampy ground. The three accompanying views give some idea of the different conditions. The size of the pipe varies from 24 inches to 16 inches,

of fill for wood pipe. We will not fill the deep cuts on our line until we have determined just what the pipe will safely stand. It is also probable that the chances of rupture of the wood pipe would be decreased by fastening steel winding to the wood at frequent intervals instead of merely fastening it at the ends of the pipes.

"The entire work was in charge of our engineer, R. M. Mullen, and he has succeeded in laying out a very satisfactory line under rather adverse conditions."

It is stated that Wyckoff wood pipe was

It is especially adapted to the manufacture of flooring, ceiling, casing, moldings, etc. It can be changed almost instantly from a planer and matcher to a surfacer, or vice versa. It is also very easily set up for a molder, as the rear table and pressure bar of the under cutter are arranged to swing out of the way to admit of easy access to the under head for changing or sharpening the knives.

The frame is very heavy and strong, and the shears, or bed plate, are gibbed on the outside of the frame, which makes them very rigid. The two large screws



THE WINDBER WOOD-PIPE LINE.

arrival of pipe. This delay totaled a little more than a month. The delivery of water commenced about the middle of January, 1909.

"The improvement in our water supply, both as to quality and quantity, has been marked. Our former source of supply had become contaminated by sulphur from mining operations farther up the stream, and was also entirely inadequate for present demands. We now have an abundant supply of pure water, with sufficient head to produce a static pressure of 70 pounds at the highest point in the town. The im-

provement in the life of boiler tubes at the various power plants using water from this system has also been very marked.

depending on the hydraulic grade to which it is laid. "The pipe line has proved to be remarkably free from leaks. A few small leaks which showed up in the wood pipe on filling the line with water were entirely stopped by the swelling of the pipe when wet and the introduction of bran into the intake end of the line. Our trouble with leakage has been at the joints between the wood pipe and the cast-iron fittings at various points. We have had no other leakage since the line was put in operation, and attribute this to the care exer-



THE WINDBER WOOD-PIPE LINE.

provement in the life of boiler tubes at the various power plants using water from this system has also been very marked.

"The total length of the wood-pipe line from the source of supply on Clear Shade Creek to South 22d street, Windber, is, approximately, 42,000 feet. At the latter point the wood line connects to a 20-inch cast-iron main approximately 3200 feet long. This main is laid under the streets, and connects the wood line with the various distribution mains previously laid.

cised by our engineer, R. M. Mullen, and his inspectors. We did not reject any pipe with sound knots, and, as we have so far had no trouble with leakage, we feel that knots of this kind are not objectionable.

"Under conditions similar to ours wood pipe has a decided advantage over cast iron, both in first cost and time required for construction. With cast iron however, there is no question as to the amount of fill that it is safe to place on pipe, but we have not as yet determined the limit



THE WINDBER WOOD-PIPE LINE.

chosen after a careful investigation of the merits of various pipes. The Wyckoff machine-made wood-stave pipe, manufactured out of Canadian white pine, shell one-and-seven-eighths inches thick and wound with No. 18 gauge, two-inch wide steel hoop, was then selected.

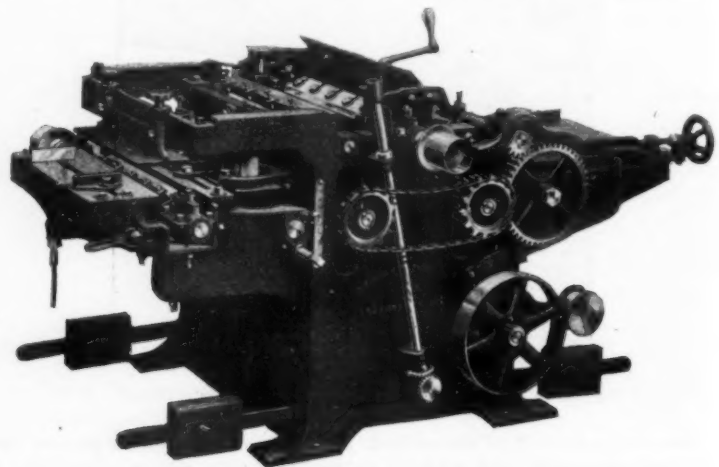
The joint is of the socket and tenon style, with four-inch lap. After the pipe is complete it is coated with an imperishable asphaltum cement, which absolutely prevents acid in the soil from getting at the steel hoops.

The Newman Planer and Matcher.

Among the prominent Southern enterprises is the Newman Machine Co., de-

signed for raising and lowering the bed are mounted on ball bearings and are operated by a crank at the right-hand side of the machine.

The cutter heads or cylinders are made from high-carbon forged steel, slotted on four sides for bolts. The top cylinders are driven by two four-inch belts and the under cylinder by one four-inch belt. The journals are large in diameter and run in long self-oiling bearings. The under cutter has a vertical adjustment to enable the operator to keep the cylinder in perfect line with the table. Both the front and rear tables of the under cutter are adjustable to admit the use of long knives for making moldings, novelty sidings, etc.



THE NEWMAN PLANER AND MATCHER.

signer and manufacturer of woodworking machines, with offices and plant at Greensboro, N. C. The company's No. 11 four-side planer and matcher is illustrated herewith.

This machine was designed to meet the demands for a four-side planer, matcher and molder for custom work in small plants where only one machine is required.

The chip breaker and pressure bars of the top head are also adjustable.

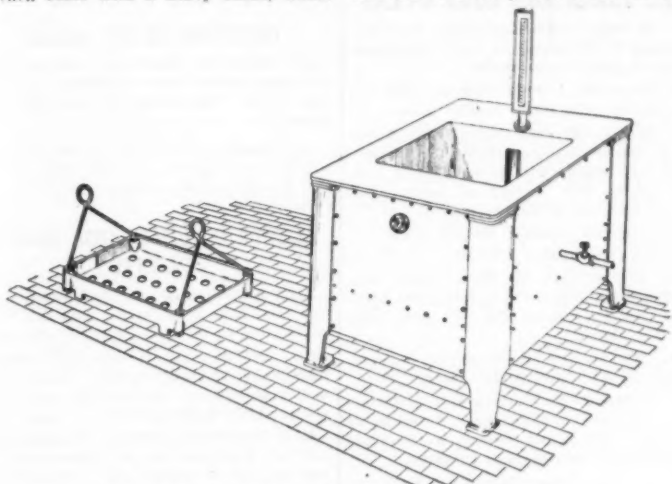
The matcher spindles or side heads stocks are both adjustable and can be moved across the table to any position desired. The spindles are large in diameter and are fitted in long self-oiling boxes. They are one and three-eighths inches in diameter where the heads are applied. The

heads are provided with a weighted chip breaker.

Each of the four feed rolls are four and one-half inches in diameter, and have long and heavy journals. The top in-feeding roll is fluted and the two in-feeding rolls are driven with a heavy set of gears. The out-feeding rolls are driven with the corresponding in-feeding rolls independently of each other with a heavy chain, which

bath which seems to meet all the requirements of such apparatus. The appearance of this device is shown in two illustrations herewith.

The bath proper consists of a cast-iron tank, or pot, having 12 lugs evenly spaced around the sides. These lugs are drilled to receive standard cartridge units, and it is found by thus distributing the units that an even temperature can be main-

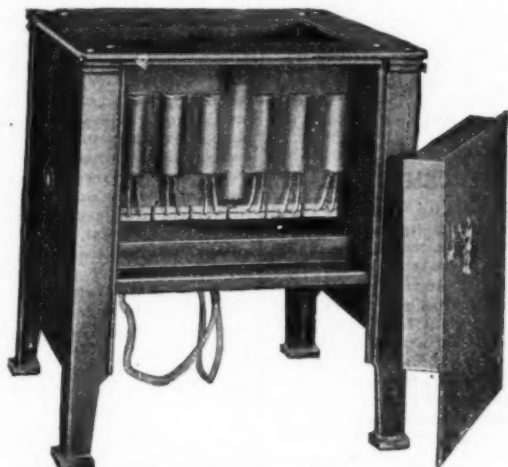


ELECTRICALLY HEATED OIL-TEMPERING BATH.

insures a positive feed. The machine has two speeds of feed—viz., 25 and 50 feet per minute.

With each machine is furnished two 20-inch knives on each of the top and bottom heads, together with a complete set of steel bolts, with case-hardened nuts for all the slots; one pair two-wing solid matcher or jointer heads, with one set of bits for making flooring; one pair bead-

tained in all parts of the oil. Around the pot is placed a heat-retaining jacket, consisting of an inner and outer wall of sheet metal, the space of three inches between the walls being filled with mineral wool. The jacketing on each side of the pot is easily removable, thus allowing quick access to the internal connections of the units. Around the top of the pot there is a wide flange, to which are secured four



ELECTRICALLY HEATED OIL-TEMPERING BATH.

ing bits, complete countershaft and necessary wrenches.

The machine planes two sides 20 inches wide and 8 inches thick without removing the side heads, joints 4 inches and will match 14 inches wide. The tight and loose pulleys on the countershaft are 12x6 inches and should run 900 revolutions per minute. The weight is 3000 pounds.

Electrically Heated Oil - Tempering Bath.

The oil-tempering bath is largely used by manufacturers for tempering steel tools or dies. It has been common practice to heat the bath by gas, but as very close regulation of temperature is essential for a uniform quality of product, gas heating has not proved satisfactory. Added to this is the ever-present fire hazard due to the excessive heat possible when gas is used.

The use of electricity has been advocated as a solution of the problem of proper oil tempering, and the General Electric Co. of Schenectady, N. Y., has recently perfected an electrically-heated oil

cast-iron legs. A drain pipe controlled by a globe valve provides a means for drawing off the oil. There is a protected recess in one end of the pot, in which a thermometer can be placed to indicate the temperature of the oil.

There are two methods of using the oil bath. In the first method the temperature of the oil is raised to about 250 degrees F.,

is supplied in which the work can be placed. The basket has eye bolts at each end to facilitate handling. The bottom of the basket is perforated with seven-eighths-inch holes, permitting free circulation of the oil. There are also legs on the bottom of the basket which keep the work an inch or more above the bottom of the bath.

The heating units are connected in groups, according to the size of the bath, and the leads are brought out to the thermal block. In the single-heat devices each

weight, combined with unusual strength and holding power, makes it an invaluable adjunct to every tool kit.

The main handle bar is made from specially-tempered drop-forged steel in the form of an I-beam, giving unusual strength and the acknowledged best grip for the hand.

The shank or lower jaw is also drop-forged steel of the same special quality and temper.

The yoke or sleeve is cold-drawn from



A NEW PIPE AND BOLT WRENCH.

group is protected by a fuse. In the multiple-heat device the leads are carried to the switchboard, the latter being so arranged that the energy input can be varied in small steps from zero to maximum. A switchboard is not necessary for the single-heat bath, but is required where a multiple-heat device is wanted.

Any desired temperature is obtained by throwing in the necessary number of units to give the approximate value. Close regulation is then secured by varying the voltage impressed on one of the units. This is

specially made and finest quality seamless steel tubing.

The tempered steel jaws will turn the sharpest file.

The grip on the nut or bolt is immediate, and as the pressure is applied it becomes tighter. The release is instantaneous. Yet with all its ease of operation the maker claims that an eight-inch wrench will twist the head off a steel bolt one-half inch in diameter without in the least affecting or straining the wrench or with the jaw slipping.



A NEW PIPE AND BOLT WRENCH.

accomplished by means of the rheostat mounted on the board. As a result of this method there is a negligible loss of energy in the regulating device.

The inside dimensions, weight, oil capacity and energy consumption of the three sizes in which the bath is made are as follows:

	Length, inches.	Width, inches.	Depth, inches.
No. 1.....	22	12	8
No. 2.....	18	12	12
No. 3.....	30	16	18

	Weight, pounds.	Oil, gallons.	Kilowatts.
No. 1.....	420	9	6
No. 2.....	475	11	7.2
No. 3.....	900	37	20

The energy consumption is sufficient to heat the oil to a temperature of 450 degrees F. in less than one hour, starting cold.

New Pipe and Bolt Wrench.

Three accompanying views illustrate the Rogers, Printz & Co. pipe and bolt wrenches, embodying the wedge principle. This feature is said to eliminate all of the many objectionable features to be found in present-day tools of this character.

The simple raising or lowering of the yoke or sleeve by the thumb of the hand holding the tool gives an instantaneous grip. The wrench is without springs,

This wrench is manufactured by Rogers, Printz & Co. of Warren, Pa.

The G.-V. Pipe Cap.

Among the electrical wiring devices introduced during the past several years is the G.-V. pipe cap for capping conduits to keep the weather out. The cap also furnishes ventilation. It is necessary that the end of the conduit be protected from the weather, as any water entering will rot the insulation and rust the conduit. (See accompanying view.)

The G.-V. pipe cap is constructed in



THE G.-V. PIPE CAP.

such a way that it can be applied after the wires are drawn in. It is also easily applied to conduits having wires already connected, as they do not have to be cut. The galvanized finish prevents rust and the brass screws make it easy to remove after it has been in place a long while.

This pipe is manufactured by the Gillette-Vibber Company, manufacturer of



SECTIONS OF NEW PIPE AND BOLT WRENCH.

the work placed in the bath and full heat turned on. When the oil reaches the desired temperature the work is removed and the current turned off. This method requires a single heat bath. The second method is to turn on full heat, bring the oil to the desired temperature, then introduce the work, and by means of regulating switches maintain that temperature constant any length of time desired.

Where desired, a cast-iron basket or tray

ratchets, time-losing adjustments or thumb screws.

The adjustment or gripping qualities are immediate (thumb does it all), and its use is possible with gloves or mittens on with equal satisfaction and ease.

For automobile and carriage use is made a special quarter inch thin bolt wrench in six-inch size, with flat jaws. This wrench is especially adapted for use on bolts of automobiles and carriages, and its light

the well-known G.-V. electrical specialties, which include ground clamps, molding boxes and outlet boxes.

The Post-Glover Electric Co. of Cincinnati, Ohio, is agent for the above specialties.

The Northwest Oklahoma Irrigation Congress, William Little, president, and Hugh M. Bixby, secretary, has petitioned the Legislature of the State to provide for State irrigation engineers.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECT

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

BRIDGES, CULVERTS, VIADUCTS

Ala., Birmingham.—St. Louis & San Francisco Railroad, M. C. Byers, chief engineer, St. Louis, Mo.; Illinois Central Railroad, A. S. Baldwin, chief engineer, Chicago, Ill.; and Birmingham Belt Railroad, M. Copeland, superintendent, Tuscaloosa, Ala., propose to construct viaduct under Twelfth avenue.

Ark., Portland.—Ashley county will construct bridge across Bayou Bartholomew. Address Ashley County Commissioners.

Ark., Van Buren.—St. Louis & San Francisco Railroad, M. C. Byers, chief engineer, St. Louis, Mo., will, it is reported, rebuild bridge across Arkansas River.

Ga., Fairburn.—Campbell County Commissioners, E. G. Hammond, chairman, will soon award contract for construction of bridge near Mallory's Crossing, in Red Oak District; will consist of two concrete piers, two concrete abutments, together with three steel spans 27 feet each, with clear roadway between rail posts of 20 feet. L. W. Roberts, Atlanta, Ga., is engineer.

Miss., Sumner.—City will construct steel bridge across Cassidy Bayou; 360 feet long; roadway, 16 feet wide; walkway, 5 feet wide; 16 spans, 4 of which will be on one side and 8 on other, are to be 20 feet long; capacity, 100 pounds per square foot on floor of roadway and 80 pounds on walkway; bids opened Co.; A. D. Neely, clerk.

Mo., Golden City.—Oklahoma & Golden City Railroad Co., John A. Griesel, general manager, will construct five large bridges and a number of small bridges.

Mo., St. Louis.—Board of Public Improvements, Maxine Reber, president, will probably award contracts soon for superstructure of three main spans (about \$1,600,000) of municipal bridge across Mississippi River; Boller & Hodge of St. Louis, consulting engineers; bridge will be double-deck, double-track, railroad and highway structure, about 500 feet long, with clear height of 65 feet above high water; will consist of three 668-foot channel spans supported on four masonry piers with pneumatic caisson foundations carried down to solid rock at extreme depth of about 137 feet below high-water

level, and about 3200 linear feet of heavy plate girder approaches; estimated steel weight is about 26,000 tons, and total cost about \$3,500,000; contract for four main-span piers awarded at about \$460,000 to Missouri Valley Bridge and Iron Works, Leavenworth, Kans.; understood that bridge main spans, 668 feet long and 110 feet deep on centers, will be longer than any independent truss span yet built. (Previously reported.)

Okla., Addington.—City will vote on issuance of \$10,000 of bonds for building bridges and roads. Address The Mayor.

Okla., Durant.—City defeated \$10,000 bond issue lately mentioned. Address The Mayor.

Okla., Lawton.—Lawton & Fort Hill Electric Railway Co., Lawton, Okla., will construct 50-foot bridge over Medicine Creek.

Okla., Sapulpa.—Creek county voted \$200,000 bond issue for construction of 69 bridges. Address County Commissioners.

Tex., Fort Worth.—Fort Worth & Rio Grande Railway Co., J. B. Berry, supervising engineer, Chicago, Ill., will construct pile bridges and cast-iron pipe culverts in connection with construction of railroad.

Tex., Keltys.—Angelina County Lumber Co. will construct wooden trestle across Angelina River.

Tex., Waco.—Citizens' Street Railway Co., Henry C. Scott, St. Louis, Mo., president, will construct steel bridge.

Tex., Weatherford.—City has commissioned bridge committee to secure plans and receive bids for construction of proposed Elm-street bridge. Address The Mayor.

Va., Big Stone Gap.—City will build proposed steel or iron bridge about 70 feet in length; Horace E. Fox, engineer. (See "Road and Street Improvements.")

Va., Cumberland.—Bids will be opened November 13 for construction of steel bridge near Flanagan's Mill; one span, 61 feet 6 inches long; bids to be opened November 13; P. St. J. Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

Va., Radford.—Norfolk & Western Railway, C. S. Churchill, chief engineer, Roanoke, Va., will construct bridge 16 feet wide; cost \$6000.

Va., Richmond.—Richmond & Henrico Railway Co. awarded contract to Blake Construction Co. of New York to construct viaduct between College and 21st and Marshall streets; will be one-half mile long and 42 feet wide; cost about \$300,000. Blake company will sublet contract to Winston & Co. and W. O. Burton, both of Wheeling. (Lately noted.)

Va., Richmond.—P. St. J. Wilson, State Highway Commissioner, will receive bids until November 8 for construction of two steel bridges over Falling and Reedy creeks. (See "Machinery Wanted.")

W. Va., Wheeling.—Pennsylvania Steel Co., Philadelphia, Pa., is lowest bidder for Benwood bridge to be constructed over Ohio River between Bellaire, Ohio, and Wheeling, W. Va.; 3000 tons of steel required.

CANNING AND PACKING PLANTS

Ark., Texarkana.—A. G. Stevens, Stuttgart, Ark., will establish cannery.

Ill., Fruitland.—Armour & Co., Chicago, Ill., it is reported, will establish preserving and packing plant.

Okla., Oklahoma City.—Morris & Co., main office, Chicago, Ill., plans erection of hog-house, cold-storage building for same, beef-house with cold-storage building, smoke-houses, lard refinery, fertilizer factory, storage buildings, cattle and hog storage-houses, power-house and reservoir in connection with packing plant; previously reported as to cost \$500,000; J. H. Agnew, construction engineer.

CLAYWORKING PLANTS

D. C., Terra Cotta (not a postoffice).—Brick National Stone & Brick Co., Columbian Bldg., Washington, D. C., will establish plant to manufacture sand lime and clay brick; daily capacity, 50,000 to 75,000; Albert S. Hicks, Takoma, D. C., president; Richard J. Beall, first vice-president; Walter A. Johnson, treasurer; Chas. G. Allen, secretary; company will erect 100x150-foot building of ordinary construction; cost of building, \$10,000; will open machinery proposals about November 10. (See "Machinery Wanted.")

Mo., Fulton.—Fire-brick.—Fulton Fire-Brick Co. increased capital stock from \$60,000 to \$120,000 and will double capacity.

Tex., Abilene.—Bricks.—Lanier Press Brick Co. will install additional press and will increase capacity to 46,000 bricks daily for daylight runs and 80,000 bricks per 24 hours.

COAL MINES AND COKE OVENS

Ky., Artemus.—Artemus-Jellico Coal Co. purchased by Barbourville, (Ky.) operators, who are making improvements.

Ky., Flatrock.—Church Coal & Coke Co. incorporated with \$10,000 capital stock.

Ky., Hellier.—Mitchell Coke Co. has chosen site in Marrowbone coal fields for its proposed coke plant; will at once begin construction of first battery of ovens; has secured all construction materials.

Ky., Pikeville.—Corbin Branch Coal Co. increased capital stock from \$1000 to \$10,000.

Ky., Rossland.—S. F. Rock, Gray, Ky., president Stratford Coal Co., purchased Lynn Camp Coal Co.'s plant and will soon begin developments.

Tex., Weatherford.—Santo Mining & Development Co. will develop coal mines.

Va., Tazewell.—Pocahontas Mining Corporation will develop 20,000 acres of coal lands at head of Big Creek. George W. St. Clair of Tazewell is interested in company.

W. Va., Charleston.—New River Securities Co. incorporated with \$300,000 capital stock by Harrison B. Smith, R. S. Spilman, Buckner Clay and others.

W. Va., Fairmont.—W. A. Marshall & Co. incorporated by Wilbur A. Marshall, New York; Walter Farnsworth and Wallace Farnsworth, Elizabeth, N. J.; David L. Morrison, New York, and James L. Mullady, Brooklyn, N. Y.

W. Va., Grantsville.—Birch Beaver Coal Co. (lately reported incorporated with \$100,000 capital stock) has organized and is buying coal lands on Birch River, in Webster county; has not formulated any development plans; president, S. M. McConaughy; treasurer, J. R. Pell; secretary, A. E. Kenney, all of Parkersburg, W. Va.

W. Va., Smithers.—W. R. Johnson Coal Co. incorporated by W. R. Johnson, Jr., Crescent, W. Va.; Buckner Clay, R. S. Spilman, J. E. Price and R. M. Price of Charleston, W. Va., to take over and develop Crescent property.

CONCRETE AND CEMENT PLANTS

Md., Security.—Security Cement & Lime Co. incorporated with capital stock of \$2,000,000; is formal incorporation of company detailed recently; succeeds Maryland Portland Cement Co. of Security and Berkeley Limestone Co. of Martinsburg, W. Va.; now increasing Security plant from daily output of 800 to 2400 barrels Portland cement and planning manufacture of all kinds of lime and stone products at Martinsburg; daily output of lump lime 2000 barrels; president, A. W. Page, president of Nazareth (Pa.) Cement Co.; vice-president, Charles Warner of Charles Warner Company, Wilmington, Del.; secretary-treasurer, Loring A. Cover, with main offices of Security Company at 820 Equitable Building, Baltimore, Md. (Other details previously mentioned.)

Md., Union Bridge.—Tidewater Portland Cement Co. plans construction of plant with annual output of 200,000 barrels hydrated lime; general offices with Republic Finance Co., 115 Broadway, New York; branch office at 807 Keyser Building, Baltimore, Md.; engineer in charge, Fuller Engineering Co., Allentown, Pa.; hydrated lime plant building to be 135x60 feet; reinforced-concrete construction; plant to be in operation about February 1; bids are being received. (Details of company's organization, plant, etc., previously reported; annual capacity to be 1,000,000 barrels Portland cement.)

Va., Suffolk.—Suffolk Cement & Tile Co. incorporated with \$10,000 capital stock; J. T. Williams, president; W. H. Eley, secretary-treasurer; T. W. Sampson, general manager; will manufacture cement and sand brick, etc.

COTTON COMPRESSES AND GINS

Ala., Wetumpka.—G. L. Bass will rebuild plant recently reported burned; will erect \$3000 building for gin, sawmill and grist mill; will install pneumatic elevator; plans by Continental Gin Co., Birmingham, Ala.; will open bids July 1, 1910.

Ga., Cochran.—J. J. Blount reported to erect gin.

Tex., Austin.—Loeb Compress Co. incorporated with \$50,000 capital stock by A. G. Bo-

denheim, E. P. Allison, Herman Loeb and others.

Tex., Haskell.—Western Cotton Oil & Gin Co., Earl Cogdell, manager, will install 10-stand gin outfit and other machinery. (See "Machinery Wanted.")

COTTONSEED-OIL MILLS

Ark., Mansfield.—Mansfield Oil & Fertilizer Co. incorporated by E. E. Holcomb and others. (See "Miscellaneous Manufacturing Plants.")

Ga., Canon.—Canon Oil & Fertilizer Co. will increase capacity of mill from one to two presses; will purchase and install machinery.

ELECTRIC-LIGHT AND POWER PLANTS

Ark., Nashville.—B. H. Rainwater, Junction City, Ark., is conferring with City Council relative to installing electric-light plant.

Ga., Dublin.—City Council will consider installation of 500-horse-power boiler, engine and generator in electric-light and water plant. Address The Mayor.

Ga., Waycross.—Burdette Loomis, president of Waycross Gas & Construction Co., has applied for franchises to furnish electricity for lighting and gas for fuel.

N. C., Andrews.—City has had surveys made for construction of hydro-electric plant to develop 300 horse-power for transmission by electricity; will light streets and offer electricity for manufacturing. H. N. Wells, Mayor. (See "Water-Works.")

N. C., Durham.—Durham Traction Co. will install additional machinery in plant, including 500-horse-power cross-compound Corliss engine, direct connected to three-phase 60-cycle 2300-volt generator or 500-kilowatt turbo-alternator.

N. C., Marshall.—North Carolina Electrical Power Co., W. T. Weaver, president, Asheville, N. C., will begin construction of water-power-electric plant on French Broad River, 2½ miles from Marshall; will build dam 500 feet long and 30 feet high; about 18,000 cubic yards cyclopean concrete; will construct stone power-house below dam and install two 2200-horse-power generators, actuated by vertical turbines, developing 4000 horse-power for transmission by electricity; will extend high-power transmission lines to company's Ivy plant, five miles distant; from there are lines extending to original W. T. Weaver plant, five miles from Asheville, and Ivy will serve as central station for distribution of power; electricity not consumed at Marshall will be transmitted to Asheville, 19 miles from Marshall, and company will install boosting apparatus for transforming to 60,000 or even 100,000 voltage; estimated cost of plant, \$400,000; engineer in charge, Charles E. Waddell of Blountmore, N. C.; company's Mountain Island power, 15 miles from Marshall, is estimated to be capable of 10,000 horse-power, and will be held in reserve. (Previously mentioned.)

N. C., Reidsville.—City is proceeding with construction of electric-light plant recently mentioned; is building 40x60-foot brick power-house; machinery purchased; capacity 200 kilowatts; E. W. Myers, engineer, Greensboro, N. C. (See "Water-works.")

Okla., Blackwell.—City awarded contract to Lund & Canyon, Blackwell, for improvements to electric-light system and extension of water-works recently mentioned; will enlarge power-house; will install 150 and 75-kilowatt generators and Corliss engines and boilers; plans by Burns & McDonnell, Kansas City, Mo.

Okla., Durant.—City voted issuance of \$20,000 bonds for installing electric-light plant. Address The Mayor.

S. C., Greenville.—Broadax Power Co. (previously reported) holdings purchased by United States Guaranty Co., John V. Ryan, president, 28 Royal St., Mobile, Ala.; will hold as subsidiary company, increase capital stock to \$250,000 and issue bonds for \$500,000; plans to construct hydro-electric plant, developing 4000 to 4500 horse-power for transmission by electricity, at cost of \$1,000,000; location of plant on Saluda River, six miles from Greenville; has not purchased water-power and electrical machinery. (See "Machinery Wanted.")

S. C., Greer.—City contemplates either contracting with Southern Power Co. of Charlotte, N. C., for electric lighting of streets and public building or erecting municipal

plant; now conferring with company. Address The Mayor.

Tex., Galveston.—Galveston & Houston Interurban Railway's proposed electric plant will be of about 1500 kilowatts capacity; specifications not prepared nor date decided for opening machinery bids; manager in charge is Stone & Webster Engineering Corporation, Boston, Mass.

FLOUR, FEED AND MEAL MILLS

Ala., Wetumpka.—G. L. Bass will rebuild plant recently reported burned. (See "Cotton Compresses and Gins.")

Okla., Durant.—J. W. Kittrell of Kittrell & Graham contemplates establishment of mill for manufacturing corn flakes and puffed rice; has not purchased any machinery. (See "Machinery Wanted.")

Tenn., Broadview, R. F. D. from Columbia. Hubble, Horn & Dugger purchased and will install grist and feed mills and 8-horse-power gasoline engine.

Tex., Pecos.—Maurer & Edwards, Chicago, Ill., will erect meal mill, warehouses, etc.; main building, 60x160 feet; \$50,000 to be invested; daily capacity, 50 tons of alfalfa and meal.

Va., Appalachia.—Appalachia Milling Co. (recently reported incorporated with \$50,000 capital stock), H. J. Ayers, president, will establish plant and erect fireproof building; cost \$10,000; will install corn and flour-mill machinery; cost \$10,000; engineer in charge, L. O. Pettit, Big Stone Gap, Va.

FOUNDRY AND MACHINE PLANTS

Ala., Birmingham.—Engines.—Douglass Engine & Manufacturing Co. incorporated with \$15,000 capital stock; R. H. Hamrick, president; C. P. McCurry, vice-president; J. E. Douglass, general manager; J. S. Kennedy, secretary-treasurer.

Ky., Henderson.—Furnaces.—Brandes Furnace Co. incorporated with \$30,000 capital stock; J. H. Brandes, president; J. R. Sabiston, vice-president; J. L. Horton, secretary-treasurer.

Ky., Louisville.—Machinery.—Atlas Machine Co. increased capital stock from \$25,000 to \$50,000.

N. C., Red Springs.—Motors and Machines. Motor & Machine Co. incorporated with \$25,000 capital stock by James A. Lane, W. E. Garrett and L. M. Cook.

Tenn., Chattanooga.—Lavatories, Bathtubs, etc.—Cahill Iron Works, 127 Boyce St., awarded contract to Adams & Schneider, 120½ East 8th St., Chattanooga, for erection of four-story brick machine-shop building; cost \$8000; electric lighting; electric freight elevator to be installed; company manufactures porcelain-lined lavatories, bathtubs, kitchen sinks, etc.; will install machinery from old building.

GAS AND OIL DEVELOPMENTS

La., Abbeville.—Polombo Oil & Mineral Co. incorporated with \$100,000 capital stock; E. Eleazar, president; Walter B. Gordy, vice-president; C. J. Edwards, treasurer; Jules Weill, secretary.

Oklahoma.—Standard Oil Co., 26 Broadway, New York, is reported as having organized Oklahoma Pipe Line Co. to construct eight-inch pipe line from Oklahoma fields to refinery at Baton Rouge, La.

Okla., Tulsa.—Tower Hill Oil & Mining Co. incorporated with \$10,000 capital stock by G. A. Stewart, Philip Kates, both of Tulsa, and A. B. Shawyer, Grimes, Iowa.

Okla., Tulsa.—Jessie Oil Co. incorporated with \$5000 capital stock by A. F. Ault, L. J. Martin and T. D. Lyons.

W. Va., Charleston.—Roane Land Co. incorporated by William A. Quarrier, Dewitt C. Gallaher, Edward C. Harrison and others.

W. Va., Charleston.—New River Securities Co. incorporated with \$300,000 capital stock by Harrison B. Smith, R. S. Spilman, Buckner Clay and others.

W. Va., Clarksburg.—Vesper Gas Co. incorporated with \$50,000 capital stock by August McDonald, O. P. Fitzgerald, L. G. Summerfield and others.

ICE AND COLD-STORAGE PLANTS

Fla., Monticello.—S. M. McCall will establish ice plant.

S. C., Charleston.—T. W. Carroll will erect brick building and equip as ice plant; capacity, 50 tons daily.

Tex., Corpus Christi.—W. C. Bailey, Abilene, Tex., contemplates establishment of cold-storage plant.

Va., New Church.—Cansey Lofland, Milton, Del., will not erect ice plant at New Church, Va. (Recently erroneously reported.)

W. Va., Shepherdstown.—Frank L. Johnson and J. H. Miller organized Johnson-Miller Co. to establish ice and cold-storage plant.

IRON AND STEEL PLANTS

Ala., Attalla.—Iron Furnaces.—W. G. Shelton, F. R. Rhodes, Charles A. Lyerly and W. G. Eaton have, it is reported, leased Eagle Iron Co.'s furnace at Attalla; will repair and blow in in near future.

Ala., Sheffield.—Iron Furnace.—Sheffield Coal & Iron Co. has blown in furnace No. 2, which has been modernized; capacity to be 225 tons daily; repairs are proceeding on furnace No. 3. (Lately mentioned.)

Tenn., Chattanooga.—Iron Furnace.—Southern Iron & Steel Co., W. H. Hassinger, president, Birmingham, Ala., has blown in its Chattanooga furnace, to which repairs have been made at cost of \$40,000; daily capacity, 175 to 200 tons of iron. John Dowling is superintendent. (Recently mentioned.)

Tenn., LaFollette.—Iron Furnace, etc.—LaFollette Iron Co., M. H. Maury, manager, has leased LaFollette Coal, Iron & Railway Co. properties; will relieve iron furnace and make general repairs; will also resume operation of iron mines and coke ovens.

Va., Graham.—Iron Furnace.—Virginia Iron, Coal & Coke Co., Bristol, Va.—Tenn., will repair Graham iron furnace, probably expending about \$10,000. N. L. Lawrence will be in charge.

LUMBER-MANUFACTURING PLANTS

Ala., Wetumpka.—G. L. Bass will rebuild plant recently reported burned. (See "Cotton Compresses and Gins.")

Ark., Camden.—Camden Mill Co. will install 100-horse-power producer-gas engine, etc.; cost of improvements, \$10,000.

Ark., Marked Tree.—Moro Land & Lumber Co. incorporated with \$12,500 capital stock; John H. Hirschmann, president; W. L. Black, vice-president; T. J. Turner, secretary-treasurer; Paul H. Westbrook, manager.

Fla., Bradford.—J. C. Carter will rebuild sawmill reported burned; loss \$6000.

Fla., Dade City.—Franklin Land Co., Brunswick, contemplates establishment of lumber and cross-tie plant. (See "Miscellaneous Manufacturing Plants." Recently mentioned.)

Ga., Tifton.—Hodges & Stubbs, Americus, Ga., purchased timber lands and will establish sawmill to cut the timber.

Ky., Louisville.—Summers-Johnson Lumber Co. incorporated with \$10,000 capital stock.

Ky., Rockport.—Rockport Sawmill Co. incorporated with \$100,000 capital stock.

Louisiana.—Nemom Cousin, Bayou LaCombe, La., will establish sawmill near Thomas C. Glynn Place, with capacity of 25,000 feet daily, to cut fallen timber.

La., Palsom.—John Rausch, Abita Springs, La., will establish sawmill to cut fallen timber.

La., Assumption Parish.—Bowie Lumber Co. purchased from Huttig-Moss Manufacturing Co., St. Joseph, Mo., at \$390,000, 75,000,000 feet of lumber.

La., Corbin.—J. B. Ferguson, Lake Arthur, La., will not establish sawmill. (Recently incorrectly noted.)

La., Hackley.—Ambrecht Lumber Co., Hattiesburg, Miss., and Flint, Erving & Stone Co., Pittsburg, Pa., have purchased timber lands and will establish lumber mill; will construct narrow-gauge railroad.

La., Monroe.—A. I. Stephens, Detroit, Mich., and associates purchased controlling interest in Cheney Lumber Co.; will enlarge plant, install new equipment, erect planing mill equipped with five machines and purchase additional stumpage; total cost of improvements, \$250,000.

La., New Orleans.—Dixie Naval Stores Co. incorporated with \$50,000 capital stock; John F. Payne, president; Buckner Chiffley, vice-president; Walter B. Gillilan, secretary-treasurer.

La., Natchitoches.—Natalbany Lumber Co. will erect seventh of series of sawmills.

Miss., Pineburg.—Car Dal Lumber Co., Heyworth Bldg., Chicago, Ill., purchased holdings of Walworth-Neville Manufacturing Co., consisting of 30,000,000 feet standing timber, 4000 acres of land, about 1,500,000 feet in sheds and yards, mill and all accessories.

Miss., Prentiss.—Trexler Lumber Co. will establish mill.

Miss., Scranton.—Farnsworth Lumber Co., Robert Hunter, president, will rebuild dry-kiln (recently reported burned); 20x105 feet; frame; cost \$1500; capacity 60,000 feet.

Miss., Tenmile.—Tenmile Lumber Co., J. R.

Pratt, president, has plans by W. P. Croft for rebuilding burned plant; 48x210 feet; mill construction; machinery purchased; daily capacity, 100,000 feet of yellow-pine lumber; engineer in charge, J. H. Rodgers, (Filer & Stowell Company, Milwaukee, Wis., recently noted as having been awarded contract for erection of plant.)

Okla., Taloga.—Liberal Lumber Co. incorporated with \$5000 capital stock by William C. Bland, St. Louis, Mo.; William Dunn and G. L. Windburn, both of Taloga.

Tenn., Covington.—Citizens' Lumber Co. incorporated with \$10,000 capital stock by W. A. Owens, J. K. Buckner, T. O. Gibbs and others; will take over Hines Lumber Co.

Tenn., Ripley.—Boxer Gin & Mill Co. will build shed and install sawmill equipment for daily output of 8000 to 10,000 feet lumber; J. W. Webb, secretary, R. F. D. No. 2. (See "Machinery Wanted.")

Tenn., Wayne County.—Lucas Land & Lumber Co., Waverly, Tenn., purchased timber on 19,000 acres of land in Wayne county and will develop.

Tex., Beaumont.—Kirby Lumber Co., Houston, Tex., will overhaul and repair Reliance sawmill; will also erect planing mill.

Tex., Houston.—A. J. Pace & Son, Kimmins, Tenn., have purchased 1107 acres of timber land near Houston and will establish 25,000-foot-capacity mill to cut oak, ash and gum.

Va., Glamorgan.—Carrier Lumber Co. will enlarge plant. (Recently incorrectly noted under Norton, W. Va.)

Va., Norfolk.—White Lumber Co. (recently noted incorporated with \$40,000 capital stock) purchased 1200 acres of land and established plant; has installed machinery; daily capacity, 15,000 feet of lumber; D. W. Raper, president; W. A. Jackson, vice-president; J. Elmer White, secretary and treasurer.

Va., Pocahontas.—Boss Manufacturing Co. reports no truth in report of timber land purchase recently mentioned.

West Virginia.—P. V. Widener, Bristol, Tenn., purchased timber land in Mercer and Monroe counties and will establish lumber plant.

W. Va., Charleston.—New River Securities Co. incorporated with \$300,000 capital stock by Harrison B. Smith, R. S. Spilman, Buckner Clay and others.

W. Va., Charleston.—Roane Land Co. incorporated by William A. Quarrier, Dewitt C. Gallaher, Edward C. Harrison and others.

W. Va., Charleston.—Beaver Tie Co. incorporated with \$10,000 capital stock by John F. Blessing, W. W. Thomas, Upshur Higginbotham and others.

W. Va., Wyoming County.—Ellis-Meyers Lumber Co., Salem, Va., purchased 1500 acres of timber land in Wyoming county.

MINING

Ala., Fort Payne.—Iron, etc.—Fort Payne Fuel & Iron Co., Ltd. (reported incorporated recently) has elected E. C. Drew president, I. Baer vice-president, T. E. Furlow secretary and G. B. Haynes treasurer; acquires and plans to develop iron-ore land, etc., of former Fort Payne company; capital stock, \$5,000,000.

Ala., Russellville.—Iron.—De Bardeleben Ore Mining Co. will develop new series of mines.

Ark., Harrison.—Iron.—D. W. Cave will develop iron-ore deposits.

Md., Havre de Grace.—Stone.—Standard Lime & Stone Co., 520-521 Equitable Bldg., Baltimore, Md., Daniel Baker, president, will install conveyor system to convey stone from quarry to boats; cost \$5000.

Mo., Washington County.—Lead and Baryta. Edwin White, South Yarmouth, Mass., and C. G. Norris, Boston, Mass., purchased at \$285,000 23,000 acres of land containing lead and baryta deposits, and will, it is reported, develop the property.

N. C., Booneford.—Mica.—R. Ed. Holland will build mica mill; steam or water power, not decided. (See "Machinery Wanted.")

Tenn., Knoxville.—Marble.—Royal Marble Co. incorporated with \$10,000 capital stock by J. C. Kincaid, John P. Kern, C. E. Lucky and F. Andrews.

Tenn., Nashville.—Phosphate.—Cumberland Phosphate & Mining Co. (recently reported incorporated with \$20,000 capital stock) will produce phosphate rock; present equipment completed; P. B. Jones, president; R. E. Donnell, vice-president; J. J. Roach, secretary; W. E. Ward, treasurer; A. W. McClure, superintendent of mines.

Tex., Weatherford.—Clay.—Santo Mining & Development Co. will develop clay deposits.

W. Va., Fairmont.—Glass Sand.—Brady & Morfit will install glass-sand plant, including crushing, grinding and conveying ma-

chinery; capacity to be 150 tons per 10 hours. (See "Machinery Wanted.")

MISCELLANEOUS CONSTRUCTION WORK

Ark., Paragould.—Canal.—Directors St. Francis Drainage District ordered issuance of \$220,000 of bonds for construction of 45-mile canal across Clay and Greene counties; B. G. Covington, chief engineer St. Francis Levee Board, Randolph Bldg., Memphis, Tenn.

Ark., Stuttgart.—Canal.—B. L. & W. M. Milliken will make private contract for irrigation machinery, etc., for canal and pumping plant recently mentioned; will irrigate about 1000 acres rice land; cost of plant, \$10,000.

La., New Orleans.—Canal, etc.—Aguan Canal Co. incorporated with \$2,000,000 capital stock; Victor Camora, president; Alfred Boesch, vice-president; Frederick B. Camora, secretary-treasurer.

La., New Orleans.—Levee Work.—Board of State Engineers, Cotton Exchange Bldg., awarded 14 contracts for levee construction as follows: Pontchartrain Levee Board—Darrowville levee, in Ascension parish, contents 40,000 cubic yards, awarded to Dale Ellis, Darrow, La., at 14.75 cents per cubic yard; Fifth Louisiana Levee District—Point Lookout spur levee, East Carroll parish, 20,000 cubic yards, and Hard Times spur levee, in Concordia parish, 25,000 cubic yards, both awarded to H. T. Garbish, Vicksburg, Miss., at 23.75 and 24.40 cents per cubic yard, respectively. By State direct—Upper Green levee, Concordia parish, 265,000 cubic yards, Donovan & Daley, at 22.4 cents per cubic yard; Southport levee, Jefferson parish, 60,000 cubic yards, and Sims levee, Ascension parish, contents 12,000 cubic yards, both to M. L. Lunnun, Gelsmar, La., at 29.97 and 24.90 cents per cubic yard, respectively; Stella levee, St. Bernard parish, 25,000 cubic yards, to Lucian Caro, Bertrandsville, La., at 17.50 cents per cubic yard; Felix Hingle levee and revetment, Plaquemine parish, 4200 cubic yards; New Canal levee, Plaquemine parish, 7000 cubic yards, and Baptiste Colette Gap levee, Plaquemine parish, 7000 cubic yards, all to W. Henritzy, Nestor, La.; Lee Rice levee and revetment, Plaquemine parish, 15,000 cubic yards, and Pelas levee and revetment, Plaquemine parish, 10,500 cubic yards, both to John Y. Buras, Buras, La.; Coco Point levee, Avoyelles parish, 30,000 cubic yards, M. Bettery, Marksville, La., at 14.90 cents per cubic yard; Sycamore levee, Concordia parish, 100,000 cubic yards, Marlow & Hodge, Natchez, La., care of Natchez Drug Store, at 15.45 cents per cubic yard; all levees on Mississippi River, except Coco Point levee, which is on Red River.

Mo., Tyler.—Levee.—Roach & Stansell, Memphis, Tenn., are lowest bidders for strengthening four miles of levee.

N. C., Transylvania County.—Lake.—J. L. Alexander, proprietor Battery Park Hotel, Asheville, N. C., proposes to construct lake in connection with hunting and fishing preserve.

Okla., Oklahoma City.—Land Reclamation.—Oklahoma and Canadian counties are considering plan to divert channel of North Canadian River so as to shorten its course 12 miles for reclamation of land in that vicinity subject to overflow. It is proposed to begin dredging in North Canadian District No. 2, first cut-off to be 6000 feet long, 13 feet deep, 50 feet wide, with slope of 1 to 1; this will reduce course of channel 7½ miles and reclaim 3000 acres; will require removal of 31,000 cubic yards of dirt to be used in construction of levee; cost to be paid by Canadian county. Next proposed channel, in District No. 3, is to be 3900 feet long and 50 feet wide, requiring removal of 112,000 feet of dirt; another cut-off is to be of same width, 2300 feet long, requiring earth removal of 86,000 cubic yards; next channel is to be 9000 feet long, 50 feet wide at bottom, 14 feet deep, and will call for removal of 270,000 cubic yards of earth; another is to be 5500 feet long, 50 feet wide at bottom and require removal of 123,000 cubic yards; concrete dam is to be built across artificial channel at its mouth; last-named channel will be constructed with teams and scrapers, and others with dredges; Warren E. Moore, county surveyor, and H. G. Finch, civil engineer, are in charge.

S. C., Spartanburg.—Lake.—J. W. Alexander has not determined upon any definite plans for construction of lake recently noted.

Tenn., Lafayette.—Drainage.—City will drain natural pond; bids invited; A. R. Harlan, Mayor. (See "Machinery Wanted.")

Tex., Brownsville.—Canal.—La Bonna Land Syndicate, J. P. McDowell, president, Pittsburg, Pa., contemplates improvements to canal on La Bonna Land property; has

awarded contract for 1000 feet galvanized tubing, 24-inch pump, engine and boiler to be installed at second lift, to double capacity; will also install additional boiler power at first lift; will install inverted syphon in place of flumes.

Tex., Brownsville — Drainage. — Cameron county will vote December 7 on issuance of \$204,600 of bonds for drainage. Address County Commissioners.

Tex., Galveston — Pier. — Bettison Fishing Pier Co. appointed committee to secure plans and specifications for new pier coating \$10,000.

Tex., Galveston — Beach Improvements. — City and Galveston county contemplate improvements on beach front aggregating \$674,696.21, as follows: Riprap now being placed at top of seawall, cost \$75,000; 27 blocks (380 feet to block) of paving, cement sidewalk, electric lights and hand rail east of 22d street, \$168,000; balance to be paid Goehart & Bates on filling contract, recently reported, \$65,000; 16 creosoted timber groynes, \$8238; replacing hand rail west of 22d street, \$2500; removing and replacing brick pavement, cement sidewalk and electric lights west of 22d street along 20 blocks, \$50,000; additional filling, \$241,270.55; mudshell surfacing for all open streets leading to boulevard, across new fill and slope, 30,800 cubic yards, \$38,500; brick gutters and box drains, \$11,187.66; beach approach for east end, \$10,000; engineering and sundries, \$5000; city will vote November 27 on issuance of \$225,000 of bonds to pay for its share of cost, and county will provide for balance; bids for construction of groynes will be received until November 11. (See "Machinery Wanted.")

Tex., Wadsworth — Irrigation. — Colonial Land Co., Clinton S. Woolfolk, president, 100 Washington St., Chicago, and Bay City, Tex., purchased 20,000 acres prairie rice land near Wadsworth; will irrigate by extension of canal recently purchased with 16,000 acres of land at Buckeye, Tex.; canal work to be done locally. (Recent item under Bay City, Tex.)

Va., Lynchburg — Subway, etc. — City, Campbell county and Southern Railway are co-operating in various improvements for development of Fairview Heights, suburb of Lynchburg; city and county are changing grades, paving, macadamizing, etc., of streets; Southern Railway, W. H. Wells, chief engineer of construction, Washington, D. C., will provide underground crossing under main lines; excavation of 12,000 to 15,000 cubic yards for railway and county has been awarded to Carroll-McGuire Contracting Co. of Lynchburg, this work having begun October 26; total expenditure, \$30,000. Brookville District Road Board, John T. McKinney, chairman, will soon award contract for paving and macadamizing, this being only work of any consequence yet to be let. H. G. Garland is engineer in charge of county's work. Betterments were promoted by R. J. Hughes, president People's Improvement Co. (Lately mentioned.)

MISCELLANEOUS ENTERPRISES

Ala., Birmingham — Contracting Drillers. — Davis Drill Co. incorporated with \$10,000 capital stock by J. L. Davidson, F. H. Davis, J. H. Falls and F. F. Davis.

Ala., Birmingham — Land Improvement. — Five Points Improvement Co. incorporated with \$20,000 capital stock; John M. Cartwright, president; C. T. Randall, vice-president; J. P. Pearson, secretary-treasurer.

Ala., Birmingham — Industrial City. — Corey Land Co. organized with capital stock of \$500,000; purchased about 300 acres land adjoining large tract recently bought by Tennessee Coal, Iron & Railroad Co. as site for large by-product coke plant lately detailed; Corey Land Co. will build modern industrial city named Gary, to provide for present and future employees of Tennessee company's plants; will provide improved streets and sidewalks, sewer system, water supply, gas supply, electric lights, electric-car service, etc.; Corey site is between Ensley and Wylam; officers, Robert Jemison, Jr., president; Walker Percy, vice-president; A. B. Tanner, secretary-treasurer.

Ala., Ensley — Land Improvement. — Gary Ensley Land Co. incorporated with \$10,000 capital stock; F. T. Frierson, president and treasurer; W. W. Crawford, vice-president; Roger W. Snyder, secretary.

Fla., Fort Lauderdale — Everglade Land. — Everglades Plantation Co. (lately reported incorporated under Mo., Kansas City) holds contract for 10,000 acres everglade lands near Fort Lauderdale; State canals completed to within six miles beyond lands; company contemplates considerable expenditure in improving and marketing land; S. J. Mattocks, treasurer, 200 Scarritt Bldg., Kansas City, Mo.

Fla., Largo — Land Development. — Cox, Sims & Flicher, 514 Commercial National Bank Bldg., Chicago, Ill., purchased tract of 18,000 acres of land on Pinellas Peninsula; tract includes town of Largo and extends from Tampa Bay to Gulf; is having land surveyed and subdivided into 5, 10, 20 and 40-acre farms.

Ga., Atlanta — Land Improvement. — Atlanta Realty Owners Incorporated with \$100,000 capital stock by S. E. Smith, O. J. Sala and John D. Dickens.

Ga., Atlanta — Automobiles. — James A. Wooten Company incorporated with \$3000 capital stock by James A. Wooten and M. R. Berry.

Ga., Macon — Land Improvement. — Rutherford Investment Co. (recently reported incorporated with \$30,000 capital stock by Herbert F. Haley, H. Horne and J. T. Nyhan) purchased 60 acres of land and will develop as residence district.

Ga., Rockmart — Hardware. — Fambro-Burnette Hardware Co. incorporated with \$7000 capital stock by J. A. Fambro, C. F. Burnette and others.

Ga., Waycross — Farm Development. — Deen Realty & Improvement Co., Geo. W. Deen, president, La Grande Bldg., will develop 50,000 acres of farm land; will provide modern roads and other improvements and market in farm tracts of 10, 20 and 40 acres; lands adapted for truck and other products; location, $\frac{1}{2}$ to 16 miles from Waycross.

Ky., Henderson — Land Improvement. — Mann Realty Co. incorporated with \$150,000 capital stock.

Ky., Louisville — Automobiles. — Bunham-Yager Motor Car Co. incorporated with \$12,000 capital stock.

Md., Baltimore — Garage. — Dixon C. Walker Automobile Co., 1917 North Charles St., awarded contract to Fred Decker & Son, 1209 East Biddle St., Baltimore, for garage at Charles and 20th streets; one story; 175x80 feet; plans by Jacob F. Gerwig, 210 East Lexington St., Baltimore. (Recently mentioned.)

Md., Baltimore — Suburban Development. — Webb & White, Forest Park, purchased 40 acres of Hayward estate and will develop into residential suburb to be known as Hayward Addition; will subdivide, macadamize Hayward avenue into boulevard, connecting Park Heights avenue and Reisterstown turnpike road and make other improvements.

Md., Baltimore — Garage. — White Auto Co. has plans by Ellicott & Emmart, Union Trust Bldg., Baltimore, for proposed garage on Mt. Royal avenue and Hunt's alley; three stories; brick and cement construction; fireproof; 163x77 feet; John Cowan, 106 West Madison St., Baltimore, named as probable contractor.

Md., Baltimore — Land Development. — Brightwood Improvement Co. will make improvements, including cement walls, curbs, gutters, macadam streets and cottages; estimated expenditure, \$75,000; Arthur F. Nicholson, president, Howard Park, Baltimore; Henry D. Mentzel, treasurer; Norman R. Ellis, secretary. (Erection of cottages by Mr. Nicholson recently mentioned.)

Mo., Carthage — Livery and Construction. — Tanguer-Brosius Livery & Construction Co. incorporated with \$10,000 capital stock by H. J. Tanguer, J. B. Brosius and John H. Flannigan.

Mo., Kansas City — Land Improvement. — Marlborough Realty Co. incorporated with \$125,000 capital stock by Henry Clay Arnold, Edward E. Vates, Luke F. Wilson and others.

Mo., Kansas City — Steam Laundry. — Faultless Laundry Co. will erect building 93½x125 feet.

Mo., Kirksville — Mercantile, etc. — Adair Brick, Coal, Mercantile & Construction Co. incorporated with \$6000 capital stock by Daniel Kent, Stephen L. Eggert and Edwin B. Reed.

Mo., Mexico — Land Improvement. — Central West Realty Co. incorporated with \$25,000 capital stock by Fred A. Morris, R. E. Race, Mexico, and Omar D. Fray, Sturgeon, Mo.

Mo., St. Louis — Steam Laundry. — University Laundry Co. incorporated with \$5000 capital stock by Dennis W. Maher, Patrick F. Gill and James D. Diamond.

Mo., St. Louis — Construction. — St. Louis Univ. Construction Co. incorporated with \$100,000 capital stock by James McD. Hunter, Louis J. Kempf, William L. Swift and others.

N. C., Asheville — Land Development. — E. W. Grove of St. Louis, Mo., has purchased 450 acres in addition to present holdings for development of residential district; will lay out, pave and macadamize roads and streets,

build automobile road, construct incline or counterweight railway to top of mountain (to cost \$30,000) and make other improvements.

N. C., Charlotte — Town. — Switzerland Company incorporated with \$25,000 capital stock by A. C. Summerville, C. H. Duls, J. B. Alexander and others; purchased 1100 acres of land and will develop as town; will erect hotel, etc.

N. C., Salisbury — Land Development. — Royal George Company incorporated with \$10,000 capital stock by Jos. M. McCorkle, Richard Eames and others.

N. C., Wilmington — Mercantile. — John R. Turrentine & Co. incorporated with \$30,000 capital stock by W. R. Jones, C. E. Kelger and others.

N. C., Winston-Salem — Land Improvement. — Winston Investment Co. incorporated with \$50,000 capital stock by A. F. Sams, J. J. Rogers and F. A. Moore.

Okl., Bartlesville — Motor Cars. — Cherokee Motor Car Co. incorporated by O. C. Staples, T. C. Ferguson, Walte Phillips and M. A. Lehr.

Okl., Clinton — Publishing. — News Publishing Co. incorporated with \$10,000 capital stock by William Walker, Mattie Walker and Laura B. Tansey.

Okl., Fairfax — Construction. — Overland Construction Co. incorporated with \$25,000 capital stock by R. H. Hess, L. A. Weismeyer, J. N. Moody and others.

Okl., Hillis — Townsite. — Lawndal Townsite Co. incorporated with \$10,000 capital stock by C. W. Gilliland, J. E. Hollis, J. K. Lunn and T. R. Whisend.

Okl., Oklahoma City — Construction. — Home Construction Co. incorporated with \$50,000 capital stock by H. A. Johnson, William Taylor, F. E. Harkness and H. S. Warner.

Okl., Tonkawa — Hardware. — J. T. Mills Hardware Co. incorporated with \$10,000 capital stock by J. T. Mills, Lou E. Mills and Roy L. Shaw.

S. C., Abbeville — Contracting. — Acker Building & Repair Co. incorporated with \$10,000 capital stock by S. A. Graves and W. J. Acker.

S. C., Greenville — Land Improvement. — West Greenville Land Co. incorporated with \$15,000 capital stock by S. E. Bradshaw, T. O. Lawson, Jr., and B. E. Geer.

S. C., Greenville — Hardware. — Carolina Hardware Co. incorporated with \$10,000 capital stock by P. A. McGrath, L. L. Barr and W. E. Waters.

Tenn., Chattanooga — Land Improvement. — N. R. B. Cooke, Knoxville, Tenn., and others purchased tract of land and will develop as residential section; will grade, subdivide into building lots and make other improvements.

Tenn., Chattanooga — Land Improvement. — R. B. Cooke, as trustee, purchased 40 acres of land at Main and Hickory streets and will convert into residential district; will lay out and pave roads and streets, subdivide into 300 building lots and make other improvements.

Tenn., Jonesboro — Printing. — P. C. Muse Printing Co. incorporated with \$5000 capital stock by P. C. Muse, R. C. Warren, H. H. Carr and others.

Tenn., Memphis — Construction. — W. P. O'Keefe Company incorporated with \$25,000 capital stock by W. P. O'Keefe, S. B. Hinds, E. C. Hinds and others.

Tenn., Memphis — Grain Elevator. — Trenholm-Dillard Company incorporated with \$20,000 capital stock by John W. Trenholm, W. White Dillard, William White and others.

Tenn., Nashville — Publishing. — Nashville Book Co. incorporated with \$20,000 capital stock by J. E. White, A. J. Harris, F. E. Roberts and others.

Tenn., Sewanee — Laundry. — Sewanee Utilities Co. incorporated with \$12,000 capital stock by C. Piggott, W. B. Hall, Samuel Sharp and others.

Tex., Fort Worth — Motor Cars. — Texas Motor Sales Co. incorporated with \$20,000 capital stock by H. E. Crowley, Ira W. Word and J. O. Wright.

Tex., Fort Worth — Laundry. — Reliable Steam Laundry Co., F. H. Sparrow, president, 1119 West Weatherford St., will rebuild laundry plant recently reported burned; will erect 50x100-foot main building and 50x25-foot boiler-house; brick and concrete structures; cost \$6000; cost of machinery (ordered), \$10,000.

Tex., Galveston — Printing Plant. — Methodist Immigration Home, E. A. Rector, pastor, will install printing plant.

Tex., Houston — Construction. — Brooks-Gordon Construction Co. incorporated with \$20,

000 capital stock by R. E. Brooks, Robert A. John and P. M. Gordon.

Tex., Houston — Machinery. — Girtlen-Russ Supply Co. incorporated with \$5000 capital stock by C. E. Girtlen, J. B. Russ and F. A. Helbig.

Tex., Fort Worth — Land Improvement. — Hill Crest Land Co. incorporated with \$25,000 capital stock by E. E. Baldrige, William Bryce, John P. King and D. O. Moldin.

Va., Franklin Park (not a postoffice) — Land Improvement. — Franklin Park Corporation incorporated with \$100,000 capital stock; Robert L. Hughes, president, 1407 F St. N. W.; R. W. Beall, first vice-president, 1441 Chapin St. N. W.; W. A. Boss, second vice-president and secretary, 1333 G St. N. W.; C. M. Stoy, treasurer, 12th and G Sts. N. W., all of Washington, D. C.

Va., Lynchburg — Printing. — Brown-Morrison Company incorporated with \$50,000 capital stock; Martin L. Brown, president; John J. Morrison, secretary-treasurer.

Va., Norfolk — Land Improvement. — Imperial Realty Corporation incorporated with \$25,000 capital stock; W. P. Oberndorfer, president; James N. Wade, vice-president; E. J. Doran, secretary-treasurer.

Va., Richmond — Construction. — Burton Construction Co. incorporated with \$50,000 capital stock; W. O. Burton, president; H. D. Eichelberger, vice-president; J. H. Headen, secretary-treasurer.

W. Va., Bluefield — Mercantile. — Globe Furnishing Co. incorporated with \$10,000 capital stock by E. E. Carter, O. S. Long, C. R. Grayson and others.

W. Va., Keyser — Orchard. — Buckhorn Peach Co. organized by J. Sloan Arnold, D. A. Arnold, R. W. Nine and others.

W. Va., Paw Paw — Orchard. — Capon Orchard Co. incorporated with \$30,000 capital stock by H. W. Miller, J. C. McKown and others.

W. Va., Woodsdale, P. O. Wheeling — Motor Cars. — Woodsdale Motor Car Co. incorporated with \$5000 capital stock by Joseph Speidel, Jr., F. McL. Speidel, J. W. Speidel and others.

MISCELLANEOUS MANUFACTURING PLANTS

Ala., Birmingham — Coffee Mills. — Gleason Tea & Coffee Co. organized with \$10,000 capital stock; Edmund N. Wheeler, president and treasurer; James D. O'Gara, vice-president; Martin E. Gleason, general manager and secretary.

Ala., Birmingham — Hastings-Bilbro Manufacturing Co. increased capital stock from \$20,000 to \$40,000.

Ala., Birmingham — Jewelry. — Herzog-Thompson Jewelry Co. incorporated with \$10,000 capital stock by E. F. Herzog, J. S. Thompson and A. L. Herzog.

Ark., Cotton Plant — Bakery. — R. R. James Company will establish bakery.

Ark., Mansfield — Fertilizer. — Mansfield Oil & Fertilizer Co. incorporated with \$20,000 capital stock by E. E. Holcomb, J. P. Ellis and Dan Hogan.

D. C., Washington — Factory. — Daniel Laughran has plans by and awarded contract to Boryer & Smith, 214 12th St. N. W., Washington, for erection of factory building at 903 E street N. W.; four stories; brick; cost \$5300.

Fla., Dade City — Turpentine. — Franklin Land Co., Brunswick, Ga., purchased 12,000 acres of timber land, and will establish turpentine plant; may later establish lumber and cross-tie plant.

Fla., Tampa — Candy. — Young & Gaither will establish candy factory.

Fla., Ocala — Fertilizer. — Ocala Fertilizer Co. incorporated with \$20,000 capital stock; J. M. Meffert, president, Ocala; J. K. Christian, vice-president, McIntosh, Fla.; W. D. Carn, secretary; J. H. Taylor, treasurer, both of Ocala.

Georgia — Paper. — Morse Lumber Co. and American Forest Co. contemplate, it is reported, establishment of paper and pulp mills. (See "Lumber-manufacturing Plants.")

Ga., Dublin — Acid Plant. — I. Bashinski will establish acid plant; will erect building; three stories; 100x400 feet; cost \$50,000; capacity 30,000 tons annually; operated by electricity.

Ga., Nashville — Bakery. — J. D. Holland will establish bakery.

Ga., Rome — Fertilizer. — Atlanta Oil & Fertilizer Co., Atlanta, Ga., purchased plant of North Georgia Fertilizer Co. and will establish \$200,000 plant; will triple present capacity and later establish oil mill.

Ga., Waycross — Wood Distilling. — Burdette Loomis, president of Waycross Gas & Com-

struction Co., has completed, it is reported, financial arrangements ensuring location of \$500,000 wood-distilling plant in pine belt between Savannah and Jacksonville; will utilize large quantities of refuse wood (after chemicals have been extracted) for manufacturing fuel gas and electricity; Mr. Loomis has applied for gas and electric franchise; now negotiating for properties needed for plants.

La., New Orleans.—Bids will be received at office of D. J. Hayes & Co., New Orleans, where plans, specifications and details are on file for erection of rice mill; 35x50 feet; boiler and engine houses. (Recently mentioned.)

Md., Baltimore.—Bakery.—William Friehofer of Vienna Baking Co., Stockholm and Howard Sts., awarded contract to John F. Kunkel, 413 King St., Baltimore, for erection of addition to plant; one story; brick; 60x53 feet; slag roof; will install ovens; cost \$6000; plans by John Freund, Jr., 210 East Lexington St., Baltimore.

Mo., Kansas City.—Pyraform Bottles.—Kansas City Pyraform Bottle Co. incorporated with \$35,000 capital stock by Herman P. Harbison, Ralph A. Hankison, both of Kansas City, and Wm. L. Poffenberger, St. Louis, Mo.

Mo., Kansas City.—Distillery.—Hirsch Distillery Co. will erect building; four stories.

Mo., Sedalia.—Water Coolers, etc.—Missouri Water Cooler & Filter Co. incorporated with \$30,000 capital stock by J. J. Weber, J. F. Guenther, both of Sedalia, and B. F. Weaver, Chillicothe, Mo.

Mo., St. Louis.—Bakery.—McKinney Bread Co. purchased site and will erect bakery.

Mo., St. Louis.—Tools, Dies, etc.—Columbia Novelty Manufacturing Co. incorporated with \$10,000 capital stock by Grover C. Graham, Willard H. Graham, George Graham and others.

Mo., St. Louis.—Rubber Cement.—St. Louis Rubber Cement Co. will erect addition to plant; site 30x200 feet.

Mo., Windsor.—Farm Implements.—Common Sense Harrow & Manufacturing Co. incorporated with \$50,000 capital stock by J. H. Brown, A. W. Cooper, J. H. Hines and others.

N. C., Henderson.—Shoes.—Henderson Shoe Co. incorporated with \$25,000 capital stock by A. J. Davis, M. Little, both of Henderson, and C. S. Little, Lincolnton, N. C.

N. C., Shelby.—Bottle Caps.—Carolina Bottle Cap Co. incorporated with \$25,000 capital stock by Stough Hopper, D. B. Simmons and M. L. Hopper.

N. C., Wilmington.—Drugs.—Hanover Drug Co. incorporated with \$25,000 capital stock by M. F. Croom, J. L. Croom and J. A. Smith.

N. C., Winston-Salem.—Shoes.—Dixie Shoe Manufacturing Co. organized with \$40,000 capital stock by Mr. Miller, Mountain City, Tenn.; W. H. Welland, Allentown, Pa., and others.

Okla., Guthrie.—Mattresses.—Guthrie Bedding Co. will establish plant at Seventh and Noble avenues for manufacturing mattresses.

Okla., Oklahoma City.—Morris & Co., Chicago, Ill., will establish fertilizer factory. (See "Canning and Packing Plants.")

Okla., Oklahoma City.—Automobiles.—Dixie Motor Car Co. incorporated with \$100,000 capital stock; R. C. Bennet, president; O. K. Sutton, vice-president; E. I. Holt, secretary; T. H. Lindley, treasurer; will erect building and equip for manufacturing automobiles; two stories; brick and concrete; proposed capacity, 500 cars annually.

Okla., Oklahoma City.—Overalls and Shirts.—Ferfoot-Miller Company will erect four-story concrete building and equip for manufacturing overalls and shirts; will also erect two additional stories to present structure.

Okla., Tulsa.—Glass.—Tulsa Glass Co. incorporated with \$75,000 capital stock by Johns S. Parks, George D. Carney and others.

S. C., Georgetown.—Turpentine.—Southern Extracting Co. incorporated with \$15,000 capital stock by M. W. Pyatt, S. M. Overton and H. L. Ellington.

S. C., Greenville.—Candy.—Carolina Candy Co. incorporated with E. R. Flesher, president.

Tenn., Chattanooga.—Toilet Articles.—Arabian Toilet Co. incorporated with \$10,000 capital stock by E. R. Beterton, F. B. Holt, L. C. Rickles, O. Martin and W. C. England.

Tenn., Memphis.—Ice Cream.—Hoadley Ice Cream Co. incorporated with \$350,000 capital stock by Arthur J. Hoadley, William J. Hoadley, Frank J. McAvoy and others; will take over and enlarge plant of former Hoadley Ice Cream Co.

Tenn., Memphis.—Drugs.—Suburban Drug Co. incorporated with \$500 capital stock by

W. E. Howard, M. A. Brewer, L. T. M. Canada and others.

Tenn., Memphis.—Bottling.—R. M. Becker's Hygeia Bottling Works incorporated with \$20,000 capital stock by R. M. Becker, Arthur M. Becker, F. Zimmermann and others.

Tenn., Memphis.—Bottling.—R. M. Becker's Hygeia Bottling Works incorporated with \$20,000 capital stock by R. M. Becker, A. M. Becker, Dora J. Becker and others.

Tenn., Nashville.—Shoes.—Piedmont Shoe Repairing & Manufacturing Co. incorporated by E. P. Cooper, I. K. Abrahams, David Rosenfeld and others.

Tenn., Nashville.—B. Rich will erect factory building; brick; cost \$8000.

Tex., Denison.—Soap.—Booster Soap Co. incorporated with \$10,000 capital stock by H. A. Johnson, H. Clay Smith and George M. Browder.

Tex., Liberty.—Rice.—Moore's Bluff Rice Co. incorporated with \$150,000 capital stock by E. E. Sapp, Liberty; F. B. West, E. D. Smith, both of Houston, Tex.

Tex., Sherman.—Gas Plant.—Sherman Gaslight & Fuel Co. awarded contracts as follows for erection of proposed gas plant: For complete gas apparatus, to Gas Machinery Co., Cleveland, O.; for foundation, to L. C. Chapman, Sherman; for erection of building, to Alonzo J. Anderson, Sherman; plans by A. J. Anderson, Sherman, call for structure 30.8x40.8; fireproof construction; clearance 25 feet between floor and iron trusses; concrete; cost of machinery \$7000; cost of building \$3500; capacity 250,000 cubic feet water gas daily; W. J. McCorkindale, Ishpeming, Mich., engineer in charge.

Tex., Victoria.—Animal Traps.—Oriental Novelty Co. incorporated by John J. Welder, James J. Murphy and Leopold Morris.

Va., Norfolk.—Ice Cream.—Diggs Ice Cream Manufacturing Co. incorporated with \$10,000 capital stock; E. B. Ives, president; H. C. Irving, vice-president; Louis Feuerstein, secretary.

Va., Norfolk.—Milk Cartons.—Single Service Package Corporation of America, main office, New York, contemplates establishment of patented cardboard milk cartons—substitute for glass bottles.

Va., Norfolk.—Drugs.—Southern Drug Co. incorporated with Peter Wright president, A. H. Mowry vice-president, Charles M. Gray secretary-treasurer.

Va., Scottsville.—Creamery.—Scottsville Creamery Association incorporated with \$10,000 capital stock; D. H. Pitts, president; D. A. Langhorne, vice-president; S. R. Gault, general manager; W. S. Dorner, treasurer; E. L. Fox, secretary.

Va., Staunton.—Gloves.—C. H. Smith will establish plant in Peyton Building for manufacturing gloves.

W. Va., Buchannon.—Window Glass.—Cunningham Window Glass Co., Thos. S. Cunningham, president (recently reported incorporated), has acquired and will remodel old window-glass plant.

W. Va., Grafton.—Glass.—Tygart Valley Glass Co. awarded contract to John W. Gizeley, Grafton, for erection of addition to plant; 20x40 feet; to cover continuous tank; will also install additional equipment.

W. Va., Martinsburg.—Lime and Stone Products.—Security Cement & Lime Co. incorporated with capital stock of \$2,000,000; secretary-treasurer, Loring A. Cover, \$20 Equitable Bldg., Baltimore, Md. (See Md., Security, under "Concrete and Cement Plants.")

W. Va., Parkersburg.—Shoes.—Regent Shoe Co. incorporated with \$25,000 capital stock by Sam Logan, J. S. Dunn, Harry L. Biddle and others; office, 519 Market street.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Ga., Manchester.—Atlanta, Birmingham & Atlantic Railroad, Alex. Bonnyman, general manager, Atlanta, Ga., is reported as about to begin actual work on construction of proposed \$100,000 general shops.

Md., Hagerstown.—Western Maryland Railroad Co., R. R. Pratt, chief engineer, Hillen Station, Baltimore, Md., has plans for proposed addition lately mentioned to shops; machine shop, 40x50 feet; blacksmith shop, 50x50 feet; brick; slag roof; cost \$25,000.

Miss., Union Church.—Mississippi Western Railroad, J. W. Hudson, president, Hazlehurst, Miss., reported to erect shops at Union Church.

Va., Roanoke.—Norfolk & Western Railway, C. S. Churchill, chief engineer, Roanoke, Va., will, it is reported, enlarge yards between Roanoke and Vinton and erect roundhouse in East Roanoke.

ROAD AND STREET IMPROVEMENTS

Ala., Birmingham.—City opened bids November 3 for certain vitrified brick, granitoid, hassam-granite block, bitulithic and asphalt paving; also certain grading, macadamizing, curb, gutter and sidewalk paving; Maury Nicholson, City Engineer.

Ala., Ensley.—City opened bids November 3 for paving 26,000 square yards of street with vitrified brick, tar-cap macadam, bitulithic, asphalt and petroleum oil-blender macadam; also on same date for furnishing tools, materials, etc., for constructing artificial stone sidewalks, combined curb and gutter and grading certain streets; V. E. Ohl, City Engineer.

Ala., Luverne.—Crenshaw county will vote November 15 on issuance of bonds for road improvements. Address County Commissioners.

Ala., New Decatur.—City will pave sidewalks and otherwise improve Second, Fourth, Sixth and Eighth avenues, Johnson street, etc.; bids to be opened November 9; E. C. Payne, Mayor. (See "Machinery Wanted.")

Ala., North Birmingham.—A. J. Hawkins, City Engineer, will receive bids until November 9 for grading, macadamizing and laying concrete sidewalks, gutters and granite curb on 22d street, between Thirty-fifth and Thirty-sixth avenues, and on Thirty-sixth avenue from 21st to 22d street. (See "Machinery Wanted.")

Ala., Pratt City.—City awarded contract to Cole Harkins & Co. of Pratt City for proposed sidewalk improvements; expenditure \$16,000.

Ark., Cotton Plant.—City does not contemplate paving streets at present; W. G. Jones, Mayor. (Lately reported.)

Ark., Pine Bluff.—James Gould, County Judge, will soon perfect improvement district in Jefferson county for construction of macadam road 25 miles long.

Fla., Jacksonville.—Duval county voted \$1,000,000 bond issue for road improvements. Address County Commissioners. (Lately mentioned.)

Fla., Panama City.—City contemplates expending \$1000 on improvement of streets; R. L. McKenzie, Mayor.

Ky., Paducah.—City will construct 96,500 square feet concrete sidewalks, 17,620 linear feet granite curbing, 17,620 linear feet concrete gutter, 7250 square feet concrete driveways and 1700 linear feet cast-iron drain pipe; bids to be opened November 23; L. A. Washington, City Engineer. (See "Machinery Wanted.")

La., Crowley.—Police Jury of Acadia parish, George E. Brooks, president, appropriated \$2000 for construction of road from Mermentau River to east line of Acadia parish.

Okla., Addington.—City will vote on issuance of \$10,000 of bonds for building roads and bridges. Address The Mayor.

Okla., Oklahoma City.—City will open bids November 8 for construction of certain sidewalks; Bob Parman, City Clerk. (See "Machinery Wanted.")

Okla., Oklahoma City.—City contemplates paving 23d, 24th, 25th, 27th and other streets; Henry M. Scales, Mayor.

Tenn., Bristol.—Sullivan County Road Commissioners (John H. Caldwell and others) will open bids November 15 for grading and macadamizing 60 miles of road; F. G. Phillips of Bristol, engineer. (See "Machinery Wanted.")

Tenn., Memphis.—City will pave Schmitz alley, North Center lane, etc.; bids to be opened November 5; James H. Malone, Mayor. (See "Machinery Wanted.")

Tenn., Mountain View, P. O. Knoxville.—City voted issuance of \$20,000 of bonds for improvements to streets and school building. Address The Mayor. (Recently mentioned.)

Tex., Denton.—Justice Precinct No. 1 of Denton county will vote November 27 on issuance of \$300,000 of bonds for road improvements. Address County Commissioners.

Tex., Hempstead.—Precinct No. 1 of Waller county will vote on issuance of \$25,000 of bonds for road improvements. Address County Commissioners.

Tex., Sherman.—City will vote on issuance of \$5000 of bonds for street improvements. Address The Mayor.

Tex., Timpson.—Shelby County Commissioners, Center, Tex., will be petitioned to order election in vicinity of Timpson to vote on formation of Road District No. 7 and issuance of \$50,000 of bonds for road improvements.

Va., Big Stone Gap.—City voted issuance of \$30,000 of bonds as follows: \$22,000 to im-

prove streets, sidewalks and roads; \$4000 to repair and extend sewer system and \$4000 to erect town hall and jail; will construct from five to seven miles limestone macadamized road about 15 feet wide; city will probably supply crushed limestone rock and award contract for laying and making road; work to include steel or iron bridge 70 feet long; amount of bond issue to be supplemented; Horace E. Fox, engineer; John W. Chalkley, chairman committee.

Va., Lynchburg.—City and Campbell county contemplate street improvements, including changing grades, paving, macadamizing, etc.; Brookville District Road Board, John T. McKinney, chairman, will soon award contract for paving and macadamizing. (See "Miscellaneous Construction Work.")

Va., Manchester.—City awarded contract for street paving to J. W. Cleary and H. H. Pilkinton of Norfolk at \$4,762.50.

Va., Staunton.—Augusta County Board of Supervisors awarded contract to R. S. Payne of Staunton to construct four and one-half miles of Greenville road.

SEWER CONSTRUCTION

Ala., Pratt City.—Wheelock Engineering Co., 711 Farley Bldg., Birmingham, Ala., will open bids November 8 for construction of certain sanitary sewers at Pratt City. (See "Machinery Wanted.")

Ala., Tuscaloosa.—City voted issuance of \$25,000 of bonds to extend sewer system. Address The Mayor. (Recently mentioned.)

Fla., Bartow.—City is completing arrangements for construction of proposed sewer system; W. W. Lyon, Jacksonville, Fla., will be engineer in charge; W. W. Clark, Mayor.

Ga., Dublin.—City voted \$40,000 bond issue for construction of sewer system. Address The Mayor.

La., Fort St. Philip.—Aiken O'Reilly Company, 308 Wells-Fargo Bldg., New Orleans, La., has contract for sewerage system recently mentioned.

La., New Iberia.—City contemplates installing sewer system. Address The Mayor.

Miss., Clarksdale.—City will expend \$5000 in construction of eight-inch sewer and six-inch water mains in Oakhurst Addition to Clarksdale; these lines are to attach to old mains now in use; day labor under supervision of Walter S. Bobo of Clarksdale, engineer. (Lately noted.)

N. C., Andrews.—City will construct sewerage system; H. N. Wells, Mayor. (See "Water works.")

N. C., Reidsville.—City has not decided on date of opening bids for construction of 13 miles sewers, disposal plant, etc., recently mentioned; engineer in charge, E. W. Myers, Greensboro, N. C. (See "Water works.")

Okla., Ada.—City will open bids November 15 for construction of lateral sewers in Districts Nos. 1 and 2; W. B. Jones, City Clerk. (See "Machinery Wanted.")

Okla., Oklahoma City.—City will open bids November 15 for construction of Kate-avenue storm sewer system, Kelly and Laird avenues storm sewer system, East Side main sanitary sewer system, and lateral sewer in Riverside Addition, South Park Addition and South Riverside Addition; Bob Parman, City Clerk. (See "Machinery Wanted.")

Okla., Oklahoma City.—City will create sewer district in certain portions of Riverside Addition and construct sewers in accordance with plans, profile and specifications prepared by City Engineer, on file in office of Bob Parman, City Clerk; Henry M. Scales, Mayor.

Va., Big Stone Gap.—City voted issuance of \$4000 of bonds to extend and repair sewer system; amount of bond issue to be supplemented; will build about 3000 feet main sewerage line; Horace E. Fox, engineer. (See "Road and Street Improvements.")

TELEPHONE SYSTEMS

Md., Frederick.—Chesapeake & Potomac Telephone Co., 5 Light St., Baltimore, Md., purchased telephone line of Frederick County Telephone & Telegraph Co.

Miss., Jackson.—Mississippi Home Telephone Co., Geo. C. Graeber, president (recently noted to establish telephone system), awarded contract to I. C. Gaerber, Jackson, to erect building; 25x60 feet; two stories and basement; entire cost of plant between \$15,000 and \$20,000; capacity, 3000 lines; automatic system; will also construct 200 miles of toll lines.

Okla., Geary.—Geary Telephone Co. incorporated with \$9000 capital stock by Horace Truman, Ernest Truman and Dora T. Pinkerton.

Okla., Sedan.—Saddle Mountain Mutual Telephone Co. incorporated by Amos M. Thompson, A. B. Melner and others.

Tenn., Dickson.—Citizens' Telephone Co. has plans by E. C. Fuqua, Dickson, Tenn., for construction of telephone system recently noted; C. E. Eberhart, M.D., president; J. R. Baker, vice-president; J. A. Clement, secretary and treasurer. (See "Machinery Wanted.")

Tex., Brownsville.—Southwestern Telegraph & Telephone Co., main office, Dallas, Tex., will shortly begin construction of copper-circuits telephone system.

Va., Hume.—Morven Telephone Co. incorporated with \$3000 capital stock; James R. Green, president, Markham, Va.; E. Marshall Newton, secretary-treasurer, Hume.

TEXTILE MILLS

Ark., Morrillton.—Woolen Goods.—Scanlon Bros. are reported as to incorporate and enlarge their woolen mill.

Ga., Canton.—Denim.—Canton Cotton Mills will build addition as reported lately; will erect 127x300-foot building and install about 10,000 spindles, 274 looms, 54 cards, etc.; Stuart W. Cramer of Charlotte, N. C., is engineer in charge, and all contracts have been awarded; expenditure about \$250,000.

Md., Hagerstown.—Silk.—Klots Throwing Co. will build one-story brick addition for humidifying department and machine shop; will add silk winders; has begun construction.

N. C., Asheville.—Quilts.—Asheville Quilt Mills incorporated with capital stock of \$150,000 by J. A. Martin of Hickory, N. C.; John H. Carter and J. G. Merriman of Asheville.

N. C., Bessemer City.—Madras, etc.—Slater Manufacturing Co. changed name to Osage Manufacturing Co. and ordered 400 additional looms; now has 15,216 spindles and 400 looms.

N. C., Concord.—Cotton Yarns.—Magnolia Mills Co. will build addition as reported recently, but will not add to machinery; addition 56x75 feet.

N. C., Concord.—Bleachery, etc.—Kerr Bleaching and Finishing Works increased capital stock from \$25,000 to \$45,000.

N. C., Gastonia.—Cotton Yarns.—Flint Manufacturing Co. has ordered and begun installation of 2000 spindles additional; present equipment, 5500 ring spindles, etc.

N. C., Lenoir.—Cotton Yarns.—Saxony Spinning Co. (previously reported incorporated, etc.) is erecting plant; main building 75x316 feet, of brick, with picker, boiler and engine rooms adjoining; warehouse 40x100 feet, of brick; 30 one-story cottages for operatives; will install 5760 spindles and plans future increase to 10,000 spindles; steam-power plant; engineer in charge, Stuart W. Cramer of Charlotte, N. C.; all contracts awarded; authorized capital \$200,000; James Lee Love, treasurer.

S. C., Anderson.—Sheeting, etc.—Orr Cotton Mills will, it is reported, expend \$40,000 for machinery to change production to fine cloth; present equipment, 57,496 ring spindles and 1504 looms.

Okla., Lawton.—Cotton Cloth.—E. L. Shuford Manufacturing Co. will be organized with capital stock of \$500,000 by E. L. Shuford of Hickory, N. C., and associates; to build mill of 10,000 spindles and 340 looms.

S. C., Greenwood.—Gray Goods.—Greenwood Cotton Mills will, it is reported, install additional machinery in No. 2 mill; present equipment, 30,000 ring spindles and 700 broad looms.

Tenn., LaFollette.—Hosiery.—LaFollette Hosiery Mills incorporated with \$25,000 capital stock by K. M. LaFollette, A. J. Carr, H. M. LaFollette, T. C. Mitchell and H. M. Dellus.

Tenn., Nashville.—Hosiery.—May Hosiery Mills (lately reported incorporated with \$60,000 capital stock) has organized with Jacob Mays, president, and Julius W. Martin, secretary-treasurer; succeeds Rock City Hosiery Mills, and is erecting buildings; main structure 60x225 feet, two stories; dyehouse 55x125 feet, one story; outhouse, storage and boiler-room 50x100 feet, one story; will operate about 300 knitting machines, 25 sewing machines, etc.

Va., Norfolk.—Knit Garments.—The Knitting Mills Corporation (reported incorporated last week with \$25,000 capital stock) has purchased complete plant; brick building with floor space for doubling capacity; electric power; daily output 200 garments; G. P. Peed, president.

Va., Suffolk.—Hosiery.—Bell Hosiery Mills (lately reported incorporated with \$10,000 capital stock) has organized; will erect brick mill building 40x100 feet and engine and boiler room 18x20 feet; will install 12 ribbers, 12 footers, hosiery drier, 40-horse-power boiler, 20-horse-power engine, 140-light electric equipment, etc.; James L. Bell, general manager.

WATER-WORKS

Fla., Panama City.—City contemplates expenditure of \$8000 for water-works; R. L. McKenzie, Mayor.

Ga., Dublin.—City Council will consider installation of 500-horse-power boiler, engine and generator in water and light plant. Address The Mayor.

La., Fort St. Philip.—General Contract Co., 323 Hennen Bldg., New Orleans, La., has contract for water-works, tank, power-house, concrete reservoir, pump-house machinery, etc. (Mentioned recently.)

Miss., Clarksdale.—City will lay six-inch water mains in Oakhurst Addition; work will be done by day labor under supervision of Walter S. Bobo of Clarksdale, engineer. (Lately noted. See "Sewer Construction.")

Miss., Gulfport.—M. F. Sullivan, City Engineer, prepared plans for proposed extension of water system; principally six and eight-inch piping; estimated cost \$34,000.

N. C., Andrews.—City planning to install water-works and fire-protection equipment and construct sewerage system; will convey water by gravity from mountain stream two and one-half miles distant; will construct reservoir and filtering plant; H. N. Wells, Mayor. (Recently reported as voting bonds for \$20,000.)

N. C., Reidsville.—City has not set date of opening bids on improvements to water-works recently mentioned; will install power pumps and motors at pumping station; reservoir of concrete construction, capacity not yet decided; capacity of water-works 500,000 gallons per 24 hours; E. W. Myers, engineer, Greensboro, N. C.; \$100,000 available for water, sewers and lighting plant.

Okla., Blackwell.—City awarded contract to Lund & Cunyon, Blackwell, for extension of water-works and electric-light systems recently mentioned; to include enlargement of power-house and work on purification and filtration systems; plans by Burns & McDonnell, Kansas City, Mo. (See "Electric-light and Power Plants.")

Okla., Sapulpa.—City contracted with Harper & Goodwin, Kansas City, Mo., to superintend construction of water-works to cost \$200,000. (Lately noted.)

Okla., Sentinel.—City voted bond issue for construction of water-works. Address The Mayor.

S. C., Graniteville.—City will construct water-works; Mr. Costello, contractor, Augusta, Ga., has contract to develop several springs on Busbee's Branch and to construct reservoir.

Tenn., Lewisburg.—City purchased Fount Emerson farm, on which springs are located to furnish water for municipal water-works system; will increase water supply. Address The Mayor.

Tex., Belton.—City Council will advertise for bids for repairing damaged standpipe. Address The Mayor.

Tex., Cisco.—City awarded contract to Fender Bros., Kaufman, Tex., to install water clarifying plant at Lake Bernie.

Tex., Sherman.—City will vote on issuance of \$12,000 of bonds for improvements to water-works. Address The Mayor.

Tex., Wellington.—Wellington Water, Light & Ice Co. (lately reported incorporated) contemplates installation of engine and pump to supply water to 2000 inhabitants. (See "Machinery Wanted.")

Va., Richmond.—Water Committee recommended that City Council appropriate \$50,000 for installation of standpipe on Madison street; Southern Railway Supply Co. of Richmond has contract at \$10,680.30 to supply 20-inch pipe to be laid distance of 5700 feet; Chewning & Grimes of Richmond have contract at \$1.98 per square yard for concrete work in connection with repairing floor of settling basin.

Va., Strasburg.—City will improve water system. Address The Mayor.

W. Va., Jeffersonville.—Jeffersonville Water Co. incorporated with \$5000 capital stock by W. R. Roberts, Middleway, W. Va.; James M. Mason, Jr., O. M. Phillips, S. H. Landis, G. D. Moore and H. C. Getzendanner, Charles Town, W. Va.

WOODWORKING PLANTS

Ark., Danville.—Handles.—W. M. Winters, Vandale, Ark., will establish handle factory.

Ark., Jonesboro.—Woodworking.—Hampton Watson is interested in establishment of woodworking plant.

Ark., Jonesboro.—Boxes.—C. F. McCrosky, Huntington, Tenn., proposes establishment of box factory.

Ark., Walnut Ridge.—Furniture.—Walnut Ridge Furniture Co. incorporated with \$20,000

capital stock by D. Bloom, Charles Bloom and Bunk Spikes.

Ga., Tifton.—Mantels, Tables, Blinds, etc.—Tifton Variety Works incorporated with \$10,000 capital stock by J. L. Williams, L. M. Garrett, E. A. Buck and others.

La., Shreveport.—Folding Furniture.—W. R. Montgomery will establish plant for manufacturing folding furniture.

Md., Baltimore.—Boxes and Shooks.—J. A. Berryman Box & Shook Co. (recently reported incorporated) has organized with \$100,000 capital stock; J. A. Berryman, 2523 North Calvert St., president; Joseph Rosenberry, secretary-treasurer; secured building at O'Donnell and 14th streets, Highlandtown, and will equip for manufacturing shoos and boxes.

Tenn., Memphis.—Carriages, etc.—Fred F. Broens awarded contract to B. B. Bromley, Memphis, for erection of buggy and wagon shop; two stories; brick; cost \$6000.

Tex., Beaumont.—Furniture.—Giddings Stone contemplates establishment of furniture factory; address care of Major A. Harrison.

BURNED

Ala., Alexander City.—Alexander City Hardware Co.'s store; building owned by First National Bank; loss \$10,000.

Ala., Clanton.—Cannon & Sons' warehouse; loss \$3000.

Ark., Earle.—G. W. Donnahoe's cotton gin; loss \$6000.

Ark., Helena.—Clem & Co.'s planing mill; loss \$10,000.

Ark., Hot Springs.—Stratford Hotel; loss \$2000.

D. C., Washington.—Edward E. Hayden's residence at 1802 16th street N. W.; loss \$3000.

Fla., Bradford.—J. C. Carter's sawmill; loss \$6000.

Fla., Jacksonville.—American Fiber Co.'s plant; building and machinery owned by W. W. Cleveland; loss \$25,000.

Ga., Adel.—J. T. Pope's residence; loss \$5000.

Ga., Americus.—George Council's cotton gin; loss \$5000.

Ga., Benevolence.—E. G. Perryman's cotton gin; loss \$3500.

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Ga., Oxford.—Emory College's dormitory; loss \$2500.

Ga., Tifton.—J. W. Hollis' cotton gin; loss \$5000.

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Ky., Latonia.—Cincinnati Grain Co.'s grain elevator; loss \$100,000.

Ky., Louisville.—W. J. Hughes & Son's Lumber Co.'s plant; loss \$75,000.

La., Covington.—C. M. Poole's dwellings; Masonic Hall; Jones & Pickett's warehouse; total loss, \$15,000.

La., Logansport.—Aycock Bros.' cotton gin; loss \$3500.

La., New Orleans.—W. L. Langridge's McCabe's Hall; loss \$3500.

La., Orange.—Orange Theater.

Md., Perry Hall.—Mrs. E. W. Patterson's residence; loss \$10,000.

Md., Roxbury Mills.—Edward Coome's residence.

Miss., Vicksburg.—John Cassel's residence; Mrs. Hugh Lacy's residence; Mrs. George Dorsey's residence; Mrs. T. C. Linton's residence; four residences owned by Frank A. Schmidt estate; loss \$30,000.

Miss., Water Valley.—John Allen's cotton gin; loss \$10,000.

Mo., Memphis.—H. G. Merritt's flour mill; loss \$4000.

Mo., St. Louis.—Rawlings Manufacturing Co.'s building; loss \$100,000.

Okla., Okeene.—Southwestern Cement Plaster Co.'s plant; loss \$100,000.

S. C., Batesburg.—Penn Hotel, owned by A. L. Ergle; loss \$3000.

S. C., Newberry.—B. T. Bishop's stable, owned by Mrs. A. T. Brown, loss on building \$3000; T. C. Pool's stable; A. L. Knighton's stable, loss \$3000.

S. C., Ulmers.—Salkheatchie Lumber Co.'s plant, owned by John Schofield, Philadelphia, Pa.; loss \$250,000.

Tenn., Humboldt.—L. E. Rooks Lumber Co.'s warehouse; loss \$7000.

Tex., Cookville.—B. B. Stevens' building; D. A. Cook's building; total loss \$12,000.

Tex., Dallas.—Oram Building, owned by J.

M. Oram, Dallas, and James Harrison, Fort Worth, Tex.

Tex., El Paso.—King Worley's dwelling; loss \$5000.

Tex., Mount Pleasant.—Farmers' Union cotton gin; loss \$5000.

Tex., Shepherd.—R. C. Miller Lumber Co.'s steam drykiln; loss \$5000.

Va., Clifton Forge.—Chesapeake & Ohio Railway's carpenter and blacksmith shops; loss \$5000; F. I. Cabell, engineer maintenance of way, Richmond, Va.

Va., Parkesley.—Methodist Protestant Church; loss \$3000. Address The Pastor, Methodist Protestant Congregation.

Va., Richmond.—James C. Smith's residence, barns, stables and outhouses; loss \$18,000.

Va., Roanoke.—L. C. Moomaw's barn.

BUILDING NOTES

APARTMENT-HOUSES

Ga., Atlanta.—L. P. Grant estate purchased through R. A. Thompson of B. M. Grant & Co. site on which, it is reported, to erect 10-story apartment-house.

Md., Baltimore.—Raleigh Realty Co. will erect apartment-house at Garrison avenue and Dorchester road, Lenox; three stories; 50x90 feet; contain six suites of eight rooms each; frame; slate roof; cost \$20,000; plans by John R. Forsythe, 232 St. Paul St.; contract awarded to William T. Childs, 16 West 20th St., both of Baltimore.

Mo., St. Louis.—J. H. Belz will erect apartment-house to cost \$12,000.

Mo., St. Louis.—Howell Real Estate Co. will erect apartment-houses on Clara avenue and Delmar boulevard at aggregate cost of \$57,000.

N. C., Winston-Salem.—J. H. Phillips will erect apartment-house; two stories; cost \$20,000; plans by Purviance & Zimmerman.

Tenn., Chattanooga.—W. C. Wildey, care of Chattanooga Packet Co., 100 Water St., is having plans prepared by Chas. E. Bearden, Chamberlain Bldg., Chattanooga, for \$8000 apartment-house on 4th street; two stories and basement; brick; rubblestone foundation and concrete footings; tile porch floor; hard pine interior finish; cabinet mantels; hot-air heat; electric and gas lighting; proposals to be received.

Tenn., Memphis.—H. A. Keppel, 124 Washington Ave., has plans by E. W. Cunningham for erection of three-story building to contain two stores and four flats; brick; ordinary construction; hot-water heat; sidewalk elevator; cost \$7000; construction by owner. (See "Machinery Wanted.")

BANK AND OFFICE BUILDINGS

Ala., Cullman.—C. S. Leeth awarded contract to William A. Schlosser of Cullman to erect bank and store building.

D. C., Washington.—Appleton P. Clark, Jr., 605 F St. N. W., Washington, prepared plans for eight-story office building to be erected on F street.

Fla., Jacksonville.—Duval Trust Co., John W. Dodge, president, will erect office building; probably of steel or reinforced concrete construction; cost \$25,000.

Fla., Kissimmee.—Citizens' Bank, A. E. Donegan, president, will erect bank building.

Ga., Macon.—Merchants and Mechanics' Savings Bank will erect bank building; T. W. Hawkes will be cashier.

N. C., Burlington.—First National Bank has plans by Wheeler & Stern, Charlotte, N. C., for bank and office building; four stories; bank and offices on first floor; 10 offices on each of upper floors; first floor to be finished marble, mahogany and art-metal ceilings; electric passenger elevator. (Previously mentioned.)

Okla., Oklahoma City.—Isaac Fleigeltaub will erect three-story office and store building to cost \$50,000.

S. C., Blackville.—Bank of Blackville reported to erect bank building.

Va., Portsmouth.—Norfolk & Western Railway, C. S. Churchill, chief engineer, Roanoke, Va., will erect office building in connection with improvements at terminals.

W. Va., Elkins.—Elkins Electric Railway Co. purchased site on which to erect office building and temporary storage-house.

W. Va., Huntington.—Robson & Prichard, Charleston, W. Va., awarded contract to Cincinnati (O.) company for erection of office building; 10 stories; 40x160 feet; reinforced concrete; low-pressure steam heat; electric elevators; no lighting plant; cost \$150,000; plans by Elzner & Anderson, Ingalls

Bldg., Cincinnati, O. (Mentioned in September.)

CHURCHES

Ala., Birmingham.—Southside Baptist Church accepted plans by R. H. Hunt, Chattanooga, Tenn., for edifice; auditorium 62x82 feet; base of granite and upper walls of brick, with terra-cotta trimmings; six marble columns with portico will form front of structure; interior finished in hardwood; cost \$65,000; bids will be invited at once; D. H. Marbury, chairman building committee. (Latest noted.)

Ga., Atlanta.—Christian Science Church contemplates erecting edifice. Address The Pastor, Christian Science Congregation.

Ga., Columbus.—Calvary Baptist Church, Rev. J. S. Hartsfield, pastor, will erect edifice.

Ky., Somerset.—R. H. Hunt, James Bldg., Chattanooga, Tenn., has completed plans for edifice to be erected by First Baptist Church, George L. Elliott, chairman; structure to be of brick; stone trimmings; concrete footings; hard pine interior finish; steam heat; electric lighting; additional lots have been purchased so that plans may be revised. (Previously mentioned.)

La., Bogalusa.—Ladies' Aid Society of Presbyterian Church accepted plans for chapel.

Md., Denton.—Brethren Denomination purchased site, 100x180 feet, on which to erect edifice. Address The Pastor, Brethren Denomination.

N. C., Sanford.—Sanford Presbyterian congregation will erect brick edifice to cost \$15,000. Address The Pastor, Sanford Presbyterian Church.

N. C., Spring Hope.—Baptist Church, D. F. Putnam, pastor, awarded contract to H. S. Poole, Rocky Mount, N. C., for erection of edifice recently mentioned; plans by Henry E. Bonitz, Wilmington, N. C.; brick and stone structure; hot-air heat; electric lighting; estimated cost, \$10,000.

S. C., Columbia.—First Baptist Church, A. B. Kennedy, Jr., pastor, 928 Maple St., will erect Sunday-school building recently noted; auditorium seating capacity 400; steam heat; electric lighting; cost \$30,000; will open bids about November 20.

S. C., Enslay.—First Baptist Church is progressing with construction of proposed edifice; press brick; steam or hot-air heat; cost \$7500; L. S. Grandy, chairman of committee. (See "Machinery Wanted.")

Tenn., Tullahoma.—Church of Christ, R. N. Hudson, treasurer, will expend about \$4000 on erection of church edifice recently mentioned; brick or concrete; plans not yet determined.

Tex., Beaumont.—First Presbyterian Church awarded contract to M. A. McKnight & Co. of Beaumont at \$21,190 to erect edifice.

Tex., Corpus Christi.—First Baptist Church, Rev. D. B. South, pastor, awarded contract to J. F. McKnight, Hallettsville, Tex., to erect edifice; one story; pressed brick and stone.

COURTHOUSES

Tex., Hemphill.—Sabbine County Commissioners awarded contract to Dawson Construction Co., San Antonio, Tex., at \$22,500 to rebuild courthouse recently reported burned.

DWELLINGS

Ala., Gadsden.—L. N. Seeman, Elgin, Ill., purchased 36 lots in Highland Addition and awarded contracts for erection of several dwellings; cost about \$1000 each.

Ark., Piggott.—George W. Marshall will erect residence.

D. C., Washington.—Franklin T. Sanner, 18th St. and Columbia Rd. N. W., has plans by B. Stanley Simmons, 331 F St. N. W., Washington, for two dwellings on Connecticut avenue; 45 feet frontage; interior finished in Spanish style.

D. C., Washington.—Harry H. Kerr, 1711 H St. N. W., has plans by T. Kent Roberts, 2016 Maryland Ave., Baltimore, Md., for improvements to 1742 N street N. W.; cost \$15,000.

D. C., Washington.—Harry Wardman, 1333 G St. N. W., has plans by A. H. Beers, 1333 G St. N. W., Washington, for 17 dwellings on Holsmed street N. W.; three stories; brick; cost \$40,000; owner acts as contractor.

D. C., Washington.—Anna Smith awarded contract to Benjamin Blithyn, 1803 Oregon Ave. N. W., Washington, for erection of dwelling at 2409 Nichols avenue N. W.; two stories; concrete and frame; cost \$2500; plans by C. E. Webb, Warder Bldg., Washington.

D. C., Washington.—Edward J. Redfield awarded contract to George C. Hough, 1333

G St. N. W., Washington, for erection of dwelling at 9 Randolph street N. E.; two stories; brick; cost \$5500; plans by W. J. Palmer, Warder Bldg., Washington.

Fla., St. Petersburg.—Mrs. R. L. Kuder will erect bungalow; cost \$6000.

Ga., Savannah.—Henry E. Dreeson will erect residence; site 71x110 feet; artificial-stone construction.

La., Corbin.—J. W. Kirby awarded contract to J. W. Robertson, Corbin, for erection of residence.

La., Corbin.—Peak Bros. awarded contract to J. W. Robertson, Corbin, for erection of two dwellings.

Maryland.—Lawrence S. Costello, Baltimore, Md., is having plans prepared by T. Kent Roberts, 2016 Maryland Ave., Baltimore, Md., for dwelling on Eastern Shore of Maryland; colonial style; 25 rooms.

Md., Baltimore.—Richard Kutzleb, 730 East 21st St., awarded contract to Boyd & Huff, 941 North Bond St., Baltimore, for erection of cottage at Garrison and Bateman avenues; two and a half stories; asbestos shingled roof; 35x51 feet; steam heat; cost \$6000; plans by Herbert C. Aiken, 213 North Calvert St., Baltimore. (See "Machinery Wanted.")

Md., Baltimore.—Walter M. Hamson, 207 St. Paul St., has plans for six dwellings on Grindall avenue; two stories; 12x36 feet; cost \$3000.

Md., Baltimore.—Mrs. Louisa Voigt, 216 North Eutaw St., awarded contract to J. W. Koontz, 1620 North Fulton Ave., Baltimore, for erection of dwelling on Park Heights avenue; cost \$5000.

Md., Baltimore.—Edward J. Gallagher Realty Co., Eastern and Lakewood Aves., will erect 24 dwellings on Luzerne and Glover streets and Eastern avenue; 12x42 feet; pressed-brick fronts; marble trimmings; cost \$30,000.

Md., Baltimore.—Charles J. Flater, 2851 Pennsylvania Ave., has plans by Henry J. Tinley, 314 North Charles St., Baltimore, for three-story dwelling on Pennsylvania avenue, 15x51 feet; cost \$4000.

Md., Baltimore.—Owners' Realty Co., Calvert Bldg., is preparing to erect number of dwellings on Calvert street near 31st street.

Md., Baltimore.—Provident Realty Corporation, 220 St. Paul St., has plans by Henry J. Tinley, 314 North Charles St., Baltimore, for two cottages at Walbrook; 30x30 feet; slate roof; steam heat; cost \$9000.

Md., Baltimore.—Cedarcroft Land Co., 1014 American Bldg., will expend \$6000 for erection of five cottages at Cedarcroft recently mentioned; hot-water heat; electric and gas lighting; plans by Erskin & Norris, Philadelphia, Pa.

Md., Baltimore.—Clarence E. Anderson, Law Bldg., Baltimore, is receiving bids for erection of cottage in Forest Park Highlands; frame construction; three stories; contractors estimating include W. T. Childs, 16 West 10th St.; Rodgers & McCall, 21 East Saratoga St.; B. W. & E. Minor, 224 West Pratt St., all of Baltimore.

Md., Baltimore.—O. P. Roberts, 2219 East Baltimore St., has plans by Jacob F. Gerwig, 210 East Lexington St., Baltimore, for 12 dwellings on Dalrymple avenue; two stories; brick; cost \$24,000.

Md., Montgomery County.—Robert S. Woodward, 1513 16th St. N. W., Washington, D. C., will not erect stone residence as recently noted.

Md., Roland Park Station L, Baltimore.—E. L. Palmer, 112 Elmhurst road, Roland Park, has prepared plans for residence on Beechdale road; colonial style; contractors estimating include Roland Park Company, Roland Park; Gladfelter & Chambers, 2072 Woodberry Ave.; Willard E. Harn, 2700 Huntingdon Ave.; Arthur F. West, 217 South Gilmor St.; John Cowan, 106 West Madison St., all of Baltimore.

Md., Roland Park, Station L, Baltimore.—James A. Dunham, 1617 St. Paul St., Baltimore, has plans by Bayard Turnbull, 12 East Lexington St., Baltimore, for dwelling; contractors estimating include Willard E. Harn, 2700 Huntingdon Ave.; John Cowan, 106 West Madison St.; A. F. West, 217 South Gilmor St.; Gladfelter & Chambers, 2072 Woodberry Ave., all of Baltimore, and Roland Park Co., Roland Park.

Mo., St. Louis.—Paul Brown, Jr., has plans by Raymond D. Weakley, St. Louis, for residence; hollow tile inside and out.

N. C., Salisbury.—P. B. Beard awarded contract on commission to Charles Probst, Salisbury, for erection of 11-room dwelling; hot-water heat; gas and electric lighting; plans by Irwin D. Porter, Salisbury.

N. C., Winston-Salem.—J. L. Graham awarded contract to A. H. Walls, Winston-

Salem, for erection of nine-room dwelling; two stories; frame; furnace heat; gas and electric lighting; cost \$5000; plans by W. C. Northup.

N. C., Winston-Salem.—Thos. W. Davis awarded contract to Fogle Bros. Company, Winston-Salem, for erection of nine-room dwelling; ordinary construction; hot-water heat; gas and electric lighting; cedar shingles; cost \$8000; plans by Willard C. Northup, Winston-Salem.

N. C., Winston-Salem.—Methodist Children's Home will erect 10 cottages. (See "Miscellaneous Structures.")

N. C., Winston-Salem.—J. F. Hanes has plans by W. C. Northup, Winston-Salem, for \$4000 residence.

Tenn., Memphis.—S. Tate Pease awarded contract to Hudson & Mulkey, Memphis, for erection of residence; two stories; 12 rooms; brick veneer; slate roof; cost \$10,000, exclusive of heating, wiring and plumbing.

Tenn., Memphis.—Noland Fontaine awarded contract to Hudson & Mulkey, Memphis, for erection of dwelling; two stories; brick veneered; 10 rooms; cost \$10,000, exclusive of heating, wiring and plumbing.

Tenn., Memphis.—S. L. Moore, Jr., awarded contract to R. N. Lloyd, Memphis, for erection of residence; two stories; frame; seven rooms; cost \$2500, exclusive of heating, wiring and plumbing.

Tex., Mercedes.—R. J. Smith awarded contract to Mr. Reavis, Mercedes, for erection of cottage; six rooms; cost \$10,000.

Tex., San Antonio.—T. J. Matlock will erect residence and barns.

Va., Norfolk.—S. D. Brown awarded contract to Griffin Bros., Norfolk, for erection of residence; frame; cost \$3300.

Va., Petersburg.—T. M. Bellamy of Bellamy & Hough, Norfolk, Va., will erect dwelling in Chesterfield county.

GOVERNMENT AND STATE BUILDINGS

Ark., Hot Springs.—Postoffice Building.—Treasury Department, Office of Supervising Architect, James Knox Taylor, Washington, D. C. Sealed proposals will be received at this office until December 6 for construction (including plumbing, gaspiping, heating apparatus, electric conduits and wiring) of extension, remodeling, etc., to U. S. post-office at Hot Springs, in accordance with drawings and specification, copies of which may be obtained from custodian at Hot Springs or at this office, at discretion of architect.

Okl., Oklahoma City.—Postoffice.—Jos. P. Ryan & Sons, 321 Baltimore Bldg., Oklahoma City, are preparing plans for proposed U. S. postoffice building; brick structure; 140x50 feet; metal roof and skylight; steel beams; metal ceilings; wire screens, partitions and boxes; contract to be awarded November 30.

Tex., Corsicana.—Home.—State has plans by W. G. Clarkson for repair work on school and auditorium building; will replaster school and place steel ceiling in auditorium; contract awarded to Haslam Bros., Corsicana. (Recently noted.)

Tex., San Antonio.—Insane Asylum.—Southwestern Insane Asylum, J. R. Nichols, superintendent, awarded contract at \$84,500 to Brooks-Gordon Construction Co., Houston, Tex., for construction of two three-story wings and two cottages; each wing three stories with capacity of 120 beds; cottages will be two stories, equipped with basement dining-rooms, kitchens, etc., each cottage with capacity of 30 beds. (Latest mentioned.)

HOTELS

Ala., Birmingham.—Queenstown Hotel & Improvement Co. incorporated with \$15,000 capital stock; George M. Webb, president; Thomas P. Dean, vice-president; N. C. Dean, secretary-treasurer.

Ga., Savannah.—Chatham Land & Hotel Co., Harvey Granger, president, has awarded contract for preliminary plans for \$300,000 hotel. (Previously mentioned.)

N. C., Statesville.—W. J. Davis, proprietor Davis Sulphur Springs, will erect 15-room addition to hotel.

N. C., Transylvania County.—J. L. Alexander, proprietor Battery Park Hotel, Asheville, N. C., will remodel and enlarge Buck Forest Inn; will add 12 rooms.

N. C., Winston-Salem.—H. Montague awarded contract to W. Frank Joyner, Winston-Salem, N. C., for erection of hotel building; three stories; 55x70 feet; ordinary construction; hot-water heat; gas and electricity; freight elevator; plans by C. R. Ford.

Okl., Clinton.—S. R. Hawks, Jr., and W.

W. Beasley will erect hotel; brick; 50x130 feet; three stories and basement.

Okl., Tulsa.—Eugene Marr of New York is reported as to erect hotel in Tulsa.

Tenn., Chattanooga.—C. E. James, James Bldg., is reported to proceed with erection of proposed hotel adjoining 12-story James Building; structure to be nine stories; brick, stone, reinforced concrete and steel; fireproof; concrete footings have been completed and are ready to receive steel; owner is making sewer connections; plans and specifications by R. H. Hunt, James Bldg., Chattanooga.

Va., Norton.—W. Terry Bowling plans construction of hotel on High Knob, two miles from Norton.

Tex., San Angelo.—J. Cole, Big Spring, Tex., will erect six-story brick hotel.

W. Va., Clarksburg.—Nathan Goff will erect annex to Waldo Hotel; addition will contain opera-house.

W. Va., Huntington.—Wild Hotel Co. incorporated with \$10,000 capital stock by H. R. Wild, H. O. Boette, W. O. Walton and others.

MISCELLANEOUS STRUCTURES

Ala., Alexander City.—Store.—First National Bank will rebuild store for Alexander City Hardware Co.; reported burned; loss \$10,000.

Ala., Birmingham.—Store.—T. C. Cairns, Empire Bldg., awarded contract to B. F. Lee, Birmingham, for erection of store building recently noted; 70x110 feet; hot-air heat; electric lighting; cost \$17,000; plans by H. D. Breeding, Birmingham.

Ala., Newville.—Newville Mercantile Co. will erect mercantile and bank buildings; 100x40 feet and 50x30 feet; cost \$150,000 or \$200,000. (See "Machinery Wanted.")

D. C., Washington.—Store.—Story & Cobb, 12th and G Sts. N. W., are having plans prepared by T. Kent Roberts, 2016 Maryland Ave., Baltimore, Md., for enlargement of store building, including erection of additional story.

Fla., St. Petersburg.—Business.—A. C. Phell purchased Gore Block and contemplates erection of business building; will install elevator.

Fla., St. Petersburg.—Business.—Edward Tonneller, Benton Harbor, Mich., has plans by Edgar Ferdon for erection of business building recently mentioned; 40x85 feet; upper floors, offices; cost \$8000; bids opened. (See "Machinery Wanted.")

Fla., St. Petersburg.—Business.—Edward Tonneller, Benton Harbor, Mich., has plans by Architect Ferdon, St. Petersburg, for two-story brick business block; plate-glass front; 40x85 feet.

Fla., St. Petersburg.—Store.—Eureka Stone Laving Co. will erect store building; two stories.

Fla., Tampa.—Stables.—W. H. Fizer and J. U. Strode have completed 500 stalls at racing plant (in course of construction), and will erect 1000 more stalls.

Ga., Atlanta.—Gude & Walker (recently noted as having contract to make extensive improvements to auditorium-armory building) will expend \$3000 on temporary changes.

Ga., Atlanta.—Business.—E. P. McBurney will erect four-story business building to cost \$30,000.

Ga., Atlanta.—Business.—A. D. Adair & McCarthy Bros. will erect business building; cost \$20,000.

Ga., Cochran.—Stores.—R. E. Nichols reported to erect two stores.

Ga., Columbus.—Mercantile.—Julius Friedlaender & Co. will rebuild burned structure lately mentioned; 120x40 feet; brick; mill construction.

Ga., Macon.—Temple.—Masonic lodge is planning to erect temple.

Ga., Waycross.—Store.—S. H. Kress & Co., main office 336 Broadway, New York, will, it is reported, erect store building.

Ky., Paducah.—Business.—Ed D. Hannan awarded contract to George W. Katterohn, Paducah, for erection of dwelling; two stories; brick; 120x40 feet.

La., Hammond.—Lodge.—Knights of Pythias and Odd Fellows' lodges will erect lodge building; two stories; pressed-brick front; 40x150 feet; W. L. Stevens Company, New Orleans, La., has submitted plans and specifications.

La., New Orleans.—S. Gumble estate awarded contract to Julius Koch, New Orleans, for erection of proposed building for Parker-Blake Company; fireproof; steel and reinforced concrete; five stories; plans by Crosby & Henkel and Stone Bros., New Orleans.

Md., Baltimore.—Store.—John J. Faupel, 203 Clay St., awarded contract to John K. Mc-

Iver, 309 Wilson Bldg., Baltimore, for erection of building at 28 West Lexington street; one story; brick; 14x25 feet; slag roof; steam heat; cost \$4000; plans by Paul Emmart, 210 West Fayette St., Baltimore.

Md., Baltimore—Platform and Shed.—Baltimore & Ohio Railroad, A. M. Kinsman, chief engineer, Baltimore, has plans by M. A. Long, 6 Elmhurst road, Baltimore, for milk platform and shed on Howard street, between Hamburg and Henrietta streets; 18x200 feet; cost \$2500.

Md., Baltimore—Store and Dwelling.—Jas. M. Biggs, 831 North Fremont Ave., has plans by Henry J. Tinley, 314 North Charles St., Baltimore, for store and dwelling at York road and 31st street; two stories; 20x65 feet; cost \$5000.

Md., Baltimore—Store.—Nathan Gutman & Co., 9-11-15-17 West Lexington St., is planning to erect store building; five stories; about 45x125 feet.

Miss., Gulfport—Clubhouse.—Mississippi Gulf Coast Country Club appointed J. M. Halston secretary of committee to receive bids for erection of proposed \$15,000 clubhouse. (Recently mentioned.)

Mo., St. Louis—Business.—Meletio Fish & Oyster Co. will erect business building.

N. C., Balsam—Lodge.—Odd Fellows' Lodge will erect lodge building; two stories; cost \$3000; construction in charge of A. T. Harrington.

N. C., Newton—Stable.—Yount & Wilson will erect stable to replace burned structure.

N. C., Rutherfordton—Business.—D. F. Morrow and Harrell Bros. will erect brick business block.

N. C., Winston-Salem—Store.—James A. Gray has plans by W. C. Northup, Winston-Salem, for store building; three stories; pressed-brick front; tile floor.

N. C., Winston-Salem—Home.—Children's Home, H. A. Hayes, superintendent, has plans by Hook & Rogers, Charlotte, for erection of combined dormitory, dining-room, kitchen, laundry, office, etc.; ordinary brick construction; heating and lighting not yet determined; cost \$25,000; will open bids in spring; will erect other buildings later; desires correspondence with contractors. (See "Machinery Wanted.")

S. C., Chester.—W. W. Coogler will erect business building to replace burned structure; two stories; brick.

S. C., Columbia—Orphanage.—Epworth Orphanage is planning erection of additional building; brick; cost \$4000.

S. C., Marion—Hospital.—Chamber of Commerce is promoting erection of \$30,000 hospital building.

S. C., Spartanburg—Building.—J. B. Ramsey will erect building.

Tenn., Bristol—Business.—Ben J. James will erect two business buildings; one two stories; pressed-brick front; 24x184 feet; the other two stories; pressed brick front and one side; R. A. Wilson, Bristol, is estimating on construction of first building.

Tenn., Columbia—Home.—Tennessee Orphans' Home, to be established by Christian Church, W. T. Boaz, pastor, will erect 24-room structure instead of 14-room, as previously planned. (Recently mentioned.)

Tenn., Columbia—Store.—W. M. Buchanan will erect store building to replace burned structures; to be occupied by Park Bros.

Tenn., Humboldt—Stores.—J. E. Campbell and Herman L. Lannom will erect concrete store buildings.

Tenn., Knoxville—Hospital.—Eastern Hospital for Insane will erect addition at Lyon's View; appropriation, \$45,000.

Tenn., Memphis—Stores.—H. A. Keppel will erect three-story apartment building to contain two stores. (See "Apartment-houses.")

Tenn., Nashville—Lodge.—Cumberland Masonic Lodge will erect temple; site 160x160 feet.

Tenn., Rogersville—Jail.—Hawkins county awarded contract to Albert Lyons and Jas. S. Simpson, Rogersville, for erection of proposed \$8000 county jail.

Tenn., Treaswell—Clubhouse.—Nashville (Tenn.) capitalists are negotiating with William Shipman for site on which to erect clubhouse; cost \$90,000.

Tex., Alvin.—Steve Jones awarded contract to W. C. Barden, Galveston, Tex., for erection of business block; brick; cost \$10,000.

Tex., Beaumont—Business.—T. S. Reed Grocery Co. awarded contract to Thames & Weber, Beaumont, for erection of business building; three stories; 60x130 feet; brick; cost \$30,000.

Tex., Dallas—Store and Warehouse.—E. J. Frey and Charles Cobb, Jr., Marshall Tex., are having plans prepared by Lang &

Witchell, Dallas, for three-story-and-base-ment store and warehouse; 92x120 feet; mill or reinforced-concrete construction; probably steam heat; electric lighting; freight elevator; cost \$40,000; may open bids about November 20.

Tex., Goliad—Lodge.—Goliad Lodge, Odd Fellows will erect lodge building.

Tex., Smithville—Business.—E. H. Eagle-ton awarded contract to M. M. Turney, Smithville, for erection of brick business building.

Tex., Yoakum—Fraternal.—Woodmen of the World will award contract for erection of fraternal building.

Va., Lynchburg—Orphanage.—Presbyterian Orphanage will rebuild Shelton Cottage, recently reported burned, and will install central heating plant; total cost \$30,000.

Va., Monterey—Lodge.—Highland Lodge, No. 110, A. F. & A. M., has plans by W. C. West for erection of Masonic Temple building; first floor and basement for store; second floor, offices and Odd Fellows' hall; third floor, Masonic hall; 42x50 feet; cement blocks on burnt brick; heating plant not determined; electric lighting; cost \$6000; will open bids soon; H. C. Lunsford, secretary.

Va., Norfolk—Store.—Bellamy & Hough will erect store building.

Va., Norfolk—Business.—E. Tatterson, Norfolk, at \$57,785, is lowest bidder for completion of Vinery Building for Philip Levy, including erection of two additional stories, etc. (Recently mentioned.)

MUNICIPAL BUILDINGS

Ala., East Lake—Fire Station.—City voted issuance of \$8000 of bonds for erection of fire station; pressed brick; two or three stories high. Address The Mayor.

Ga., Vineville, P. O. Macon—Engine-house. W. J. Beeland of Macon is lowest bidder at \$4789 for erection of engine-house.

Okla., Blackwell—City Hall.—City awarded contract to J. L. Vance, Blackwell, for erection of city hall building recently mentioned; two-story-and-basement structure; 50x19 feet; semi-fireproof; natural-gas heating; electric and gas lighting; fire-department machinery to be installed; total cost \$12,000; plans by Owen & Payton, Kansas City, Mo.

Okla., Halleyville.—City awarded contract to G. H. Diebler, McAlester, Okla., for erection of city hall building, including jail; two stories; brick; electric lighting; stoves; cost \$6000; plans by T. W. McLoughlin. (See "Machinery Wanted.")

Okla., Oklahoma City—Jail.—City Council has authorized Swatek & Parker, contractors, of Oklahoma City, to proceed with erection of jail; report has been submitted stating that building can be erected within \$38,000 of bond issue. (Recently reported to readvertise for bids.)

Okla., Oklahoma City—Fire Station.—City is having plans prepared for proposed central fire station; three stories; reinforced concrete and brick; basement, 73x34 feet, to contain heating plant, etc.; ground floor will accommodate fire apparatus in space 60x119 feet; second floor will have private office for fire chief, main bedroom for firemen, bathrooms, etc.; upper floor will be used as drillroom and to accommodate Gamewell fire-alarm system; hot water available in all parts of building. Address The Mayor.

S. C., Anderson—Hospital.—City has plans by J. H. Casey, Anderson, for erection of addition to hospital building; will install steam heat; electric lighting; hand elevators; cost \$40,000. (Recently noted under "Miscellaneous Structures.")

Va., Big Stone Gap—Town Hall and Jail.—City voted issuance of \$4000 of bonds to erect town hall and jail; concrete or concrete-block construction; jail for 40 prisoners; plans prepared; W. H. Horton, Mayor. (See "Road and Street Improvements.")

Va., Norfolk—Corporation Court Office.—City will make addition and alterations to office of Clerk of Corporation Court; fireproof structure; plans by Taylor & Hepburn, Norfolk; appropriation (to include cost of furnishing and of filing cases), \$12,000; steam heat; bids to be opened November 9 at office of Board of Control.

Va., Norfolk—Fire-engine House.—Board of Control will have plans prepared by Ferguson & Calrow of Norfolk to remodel Queen street fire-engine house; expenditure \$10,000. (Lately mentioned.)

RAILWAY STATIONS

La., St. Joseph.—Texas & Pacific Railway, B. S. Wathen, chief engineer, Dallas Tex., is reported to erect depot.

Md., Hagerstown.—Western Maryland Rail-

road Co., H. R. Pratt, chief engineer, Hillen Station, Baltimore, Md., is acquiring land preparatory to erection of station recently mentioned; plans not yet determined.

N. C., Newbern.—Norfolk & Southern Railway, F. L. Nicholson, chief engineer, Norfolk, Va., and Atlantic Coast Line Railroad, E. B. Pleasants, chief engineer, Wilmington, N. C., reported to erect union station.

S. C., Yorkville.—Carolina & Northwestern Railway, L. T. Nichols, Chester, S. C., general manager, will erect passenger and freight depots.

Tex., San Antonio.—Southern Pacific Railway, A. V. Kellogg, engineer maintenance of way, Houston, Tex., contemplates addition to passenger station; cost \$100,000.

Va., Radford.—Norfolk & Western Railway, C. S. Churchill, chief engineer, Roanoke, Va., will enlarge depot in East Radford.

SCHOOLS

Ark., Batesville.—Arkansas College will erect \$6000 dormitory.

Ark., Marshall.—City will erect high school; two stories; brick; 60x72 feet. Address The Mayor.

Fla., Bonifay.—City has voted \$15,000 of bonds to erect school. Address The Mayor. (Recently mentioned.)

Fla., Panama City.—City contemplates erection of \$5000 school building; R. L. McKenzie, Mayor.

Ga., Gainesville.—Brenau College will erect stadium.

Ga., Savannah.—African Mission Society of Georgia, Rev. Ignatius Lissner, provincial, awarded contract to M. B. Brock, Savannah, for erection of school for colored children.

La., Eros.—City awarded contract to Randolph & Goslin, Eros, for erection of \$10,000 school building.

La., St. Bernard.—City will erect \$4000 school at Merauxville; Clem Story, Superintendent of Education.

Miss., Fayette.—Building committee, Jefferson County High School, will open bids November 12 for erection of auditorium and study hall; main hall to have seating capacity of 800 people; frame; electric lights; cost \$5000; plans and specifications on file at office of C. J. Harper, architect, Jackson, or of J. S. Logan, secretary building committee, Fayette.

Miss., Lambert.—City will erect school building; brick; coal heaters; cost \$3500; will open bids about November 15; J. L. Smart, town clerk. (Bond issue recently noted.)

Miss., Lambert.—City will issue \$5000 of bonds to erect school. Address The Mayor.

Mo., Columbia.—City will erect high school; cost \$80,000. Address The Mayor.

N. C., Durham.—Trinity College has plans by Hook & Rogers, Charlotte, N. C., for proposed college building; two stories and basement; 70x150 feet; electric lights; cost \$60,000. (Previously mentioned.)

N. C., Raleigh.—University of North Carolina is planning to erect dormitory to cost \$20,000; Thomas S. Kenan, Richard Battle, John W. Graham and others, board of trustees.

N. C., Raleigh.—Peace Institute increased capital stock from \$30,000 to \$100,000; will extend and improve buildings.

N. C., Winston-Salem.—Methodist Children's Home will erect school building. (See "Miscellaneous Structures.")

Okla., Enid.—City contemplates issuing \$250,000 of bonds to erect high school and ward schools. Address The Mayor.

S. C., Columbia.—City has plans by Edwards & Watter, 631 Candler Bldg., Atlanta, for school (recently mentioned); 12 rooms and auditorium; two stories; brick and terra-cotta; ordinary construction; steam fan system of heating; electric lights; cost \$50,000.

S. C., Greenwood.—Lander College is preparing to erect dormitory building.

Tenn., Memphis.—City accepted plans by B. C. Alsop, Memphis, for proposed manual-training high school; cost \$300,000.

Tenn., Mountain View, P. O. Knoxville.—City has voted \$20,000 of bonds for improvements to streets and schools. Address The Mayor.

Tenn., Soddy.—Hamilton County Board of Education awarded contract at \$17,749 to Meers & Dayton, 317 East 9th St., Chattanooga, Tenn., for erection of grammar school; two stories; brick; composition roof; hard pine interior finish; 75x145 feet; steam heat; plans by Adams & Alsop, James Bldg., Chattanooga, Tenn. (Previously mentioned.)

Tex., Jacksonville.—City engaged A. O.

Watson, Austin, Tex., as architect to supervise erection of proposed school; 12 rooms; cost \$25,000.

Va., Norfolk.—City awarded contract at \$184,437 to East & Hobbs, Norfolk, for erection of high school; 276x112 feet; fireproof; indirect heat; plans by Neff & Thompson, Norfolk. (Recently mentioned.)

Va., Suffolk.—City contemplates expending \$15,000 for school improvements. Address The Mayor.

THEATERS

Md., Baltimore.—Samuel L. West, 2827 Woodbrook Ave., prepared plans for proposed Neighborhood Recreation-house at West Park; building will contain theater with seating capacity of 400, gymnasiums, etc.; cost \$25,000; C. Milton West, 5 Hopkins Pl., Baltimore, submitted bid for erection.

Tenn., Nashville.—Fifth Avenue Amusement Co. incorporated with \$20,000 capital stock by H. Sudekum, R. H. Waller, A. T. Levine, A. Sudekum and W. J. Williams; will erect theater with 900 seating capacity; hot-air heat; electric lighting; cost \$21,000; plans by B. Fletcher; stage machinery to be installed.

Tex., Yoakum.—Woodmen Building Association awarded contract to Alexander Farmer, San Antonio, Tex., at \$19,135 to erect building; 100x110 feet; two stories; will be used as lodgeroom, opera-house and store building.

W. Va., Clarksburg.—Nathan Goff will locate opera-house in addition proposed to be erected to Waldo Hotel.

WAREHOUSES

D. C., Washington.—Joseph Ferrero, 909 Louisiana Ave. N. W., awarded contract to F. L. Wagner, 1311 G St. N. W., Washington, for erection of two warehouses at 1005 Little B street N. W.; one story; brick; cost \$11,000; plans by A. B. Mullett & Co., Union Trust Bldg., Washington.

Ga., Columbus.—Julius Friedlander will rebuild cotton warehouse recently reported burned; new structure will be 120x40 feet; brick; mill construction.

Md., Baltimore.—William J. Eisenbrandt, 530 North Gay St., awarded contract to B. Howard Mason, 1221 Valley St., Baltimore, for erection of warehouse lately mentioned; three stories; 25x37 feet; brick and cement; mill construction; steam heat; cost \$8000.

Mo., Kansas City.—Geo. Muehlebach Brewing Co. awarded contract to Wallace Love, care of Master Builders' Exchange, Scarrit Bldg., Kansas City, Mo., for erection of warehouse; fireproof construction; cost \$15,000; plans by Richard Griesser, Chicago, Ill. (Previously noted.)

S. C., North.—North Warehouse Co. incorporated with \$5000 capital stock by William Toney, Arlie Toney and J. M. White.

Tenn., Columbia.—Park Bros. will erect warehouse.

Tenn., Jellico.—Jellico Grocery Co. awarded contract to Perkins Bros., Jellico, for erection of warehouse; 80x180 feet; one story; brick; ordinary construction; stoves; electric lights; cost \$8500; plans by R. L. Perkins, Jellico. (Recently mentioned.)

Tenn., Nashville.—Bond Furniture Co., E. M. Bond, president, has begun erection of proposed storage-house; three stories; stone, brick and concrete; site about 130 feet square.

Tex., Dallas.—Trinity Warehouse Co. (recently reported incorporated with \$20,000 capital stock) will conduct storage and forwarding warehouse, for which contract was awarded in May.

Va., Norfolk.—Seaboard Air Line Railroad, W. L. Seddon, chief engineer, Portsmouth, Va., awarded contract to Myers-Turpin Construction Co., Norfolk, to erect warehouse; two stories; reinforced concrete; 80x225 feet. (Lately noted.)

W. Va., Charleston.—W. F. Potthoff Company, Cincinnati, Ohio, will erect composite steel and concrete warehouse; steel work begun.

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Birmingham.—The Atlanta, Birmingham & Atlantic Railroad is reported to have purchased property between 7th street, First avenue, 11th street and the Alabama Great Southern Railroad for freight yards and terminal buildings. Alexander Bonnyman is general manager and chief engineer at Atlanta, Ga.

Ala., Birmingham.—The Atlanta, Birmingham & Atlantic Railroad is reported to have

secured right of way for an extension from Birmingham southwest to Bessemer, 12 miles, and construction will begin soon. Alex. Bonnyman is general manager and chief engineer at Atlanta, Ga.

Ark., Helena.—The Interurban Railway will build four miles of line from Helena to West Helena, including two wooden bridges, each 26 feet long. R. L. Leonard has contract for earthwork and C. H. Purvis is engineer in charge, both at Helena. E. C. Horner is president and James S. Horner secretary and treasurer. Mr. Purvis is a director.

Ark., Hope.—President S. Q. Sevier of the Gulf & Magnolia Northern Railroad writes that details are being worked out preparatory to beginning construction, which it is hoped will start by January 1. Line to be 35 miles long from Magnolia to Hope, Ark., via Waldo and Bodecaw. About 3000 feet of trestle work will be required. J. H. Betts is vice-president, and R. L. Pritchard, secretary, at Hope, Ark.; J. L. Davis, treasurer, at Magnolia, Ark. The other directors are P. S. Quinn of Texarkana, Ark.; P. A. Tharp and W. Y. Foster of Hope, Ark.; Charles Clark and C. A. Kennedy of Waldo, Ark.; J. M. Witt and Henry Stevens of Magnolia, Ark.

Ark., Latour.—An officer of the Missouri Pacific Railway says that the Memphis, Louisiana & Helena Railroad will not be extended at present from Latour, Ark., to Memphis, Tenn.

Ga., Albany.—The Albany & Northern Railroad, it is reported, will be extended to St. Andrews Bay, on the Gulf of Mexico, about 200 miles. T. E. Hambleton of Baltimore, Md., is president.

Ky., Guthrie.—The Louisville & Nashville Railroad, it is reported, has let contract to the Gibson-Carr Company and the Callison Construction Co. of Middlesboro, Ky., to build six and one-half miles of new line between Guthrie and Henderson, Ky., at a cost of about \$200,000.

Ky., Louisville.—The incorporators of the Ohio, Kentucky & Ohio Railroad Co., chartered to build a line in Kentucky, are J. F. Varcoe, 311 Carlton Ave., Brooklyn, N. Y.; Warren N. Akern and William J. Maloney, Wilmington, Del.

Md., Cumberland.—The Baltimore & Ohio Railroad, it is reported, will build a hump in the Everts Creek yard at Cumberland and reconstruct some of its track. A. M. Kinsman is chief engineer at Baltimore, Md.

Miss., Gulfport.—The Gulfport & Mississippi Canal Traction Co. proposes to build a loop line 8200 feet long in West Gulfport. J. T. Jones is president.

Mo., Golden City.—The Oklahoma & Golden City Railway Co. proposes to build from Fairview, Okla., to Jefferson City, Mo., 300 miles, via Enid, Pawhuska and Bartlesville, Okla.; Joplin, Golden City, Stockton, Humansville, Climax Springs and Eldon, Mo.; also a branch from Climax Springs to Springfield, Mo., 70 miles. Contract to be let not later than January next. Engineering work partially done, some of the line being located. Five large bridges will be required. J. W. Fewell is engineer in charge and John A. Griesel general manager, both at Golden City, Mo.

Mo., Kansas City.—The St. Louis-Kansas City Electric Railway Co. has filed articles of incorporation to build a high-speed double-track electric railway without grades or curves from St. Louis to Kansas City, including a branch from Glasgow, Mo., via Charleston to Brookfield, Mo.; total length, 255 miles; capital stock \$5,000,000. The directors are D. C. Nevins and Charles A. Loomis of Kansas City, H. V. Johnson, W. Weston, B. L. Dorsey and George A. Anderson of Denver, Col.; J. H. Reeder, H. E. Insley and Randall B. Young of Kansas City, W. A. Hamilton of Chicago, L. M. Nevins and Selden T. Spencer of St. Louis, W. H. Griffiths of Hays, Kans. and W. B. Cawthorn of Columbia, Mo. It is reported that Col. W. H. Chase of St. Louis was instrumental in starting the enterprise. An English syndicate is said to be interested.

Mo., Kansas City.—The St. Louis-Kansas City Electric Railway Co. has decided to acquire right of way and make surveys, besides taking steps to finance its proposed line. Officers have been elected as follows: D. C. Nevins, president; John H. Berkshire, first vice-president; B. L. Dorsey, second vice-president; Charles A. Loomis, general solicitor; J. H. Reeder, assistant general solicitor; H. E. Insley, secretary and auditor; H. V. Johnson, treasurer.

N. C., Wilmington.—The contemplated \$200,000 bond issue of the Atlantic Coast Line will, it is announced, provide for future improvements as well as for the retirement of underlying liens. Action is to be taken

by the stockholders at Richmond, Va., November 16.

Okla., Beaver.—A letter to the Manufacturers' Record quotes J. M. Kerns of Beaver, general manager of the Beaver Valley & Northwestern Railroad, as saying that active operations will begin before January 1 on the first section from Hooker to Beaver, 40 miles. It is also proposed to build later from Beaver to Gage, Okla.

Okla., Lawton.—The Lawton & Fort Sill Electric Railway will build 18 miles of line from Lawton to Fort Sill and Medicine Park at the foot of Mount Scott in the Wichita Mountains. One bridge of 50 feet at Medicine Creek is required. Simon Smith is president; W. H. Pattle, secretary; D. L. Sleeper, vice-president and counsel, all at Oklahoma City, Okla.

Okla., Eldorado.—Contract is reported closed by the Eldorado Commercial Club with the Farmers & Merchants' Railway Co. to build a line from Eldorado via Looney and Harmon City, Okla., to Wellington, Tex. L. Simpson, president of the line, is reported to have let grading contracts and work will begin immediately.

Okla., Lawton.—C. G. Jones and L. T. Poole of Oklahoma City are reported taking steps toward building the Lawton, Wichita Falls & Northwestern Railway, to be 60 miles long from Lawton, Okla., to Wichita Falls, Tex. It is estimated that it can be built for \$17,000 per mile.

Okla., Mangum.—The Wichita Falls & Northwestern Railway Co. is letting bids by miles for grading of an extension from Mangum to Elk City, Okla., 40 miles. Two 800-foot trestles and a number of smaller timber bridges will be required. The company does its own bridging and tracklaying. R. A. Thompson, Wichita Falls, Tex., is engineer in charge.

Okla., Oklahoma City.—It is officially denied that the Santa Fe system contemplates spending \$250,000 for additional terminal facilities at Oklahoma City.

Okla., Oklahoma City.—W. S. Tinsman, representing the Rock Island system, has examined plans of the City Engineer for the railroads entering the city to spend \$3,000,000 for union depot and terminal tracks. J. B. Berry is chief engineer of the Rock Island at Chicago.

Okla., Salisaw.—The Salisaw, McAlester & Southern Railway Co. has filed location papers for line between Salisaw and Quinton, 41 miles. Line between Quinton and McAlester already filed.

Okla., Salisaw.—The St. Louis & Oklahoma Railway Co., with headquarters at Bromide, Coal county, has been chartered with \$50,000 capital to build a line from Salisaw through Sequoyah, Haskell, Pittsburg, Coal, Johnston, Murray, Carter, Garvin, Stephens, Jackson and Greer counties to a point between the Red River and the Salt Fork of the Red River, about 300 miles, at an estimated cost of \$15,000 per mile. The incorporators are O. E. Snyder, Erie, Kans.; J. D. Cameron, Kansas City, Mo.; E. S. Brodie, St. Louis, Mo.; J. M. Sholl, Joplin, Mo.; E. T. Brown, Coalgate, Okla., and W. H. Jackson, Bromide, Okla.

Okla., Tulsa.—An officer of the Santa Fe system denies the press report that survey is being made or construction is contemplated between Tulsa and Cushing, Okla.

N. C., Raleigh.—The Raleigh & Southport Railroad will extend its line from Fayetteville to Hope Mills, N. C., seven miles. J. A. Mills is president and general manager at Raleigh, N. C.

S. C., Columbia.—James U. Jackson of Augusta, Ga., and associates contemplate building an extension of the Augusta & Alken Electric Railway from Alken to Columbia. This plan has been under consideration for some time, but now it appears likely to be fulfilled.

S. C., Florence.—The Ferguson Contracting Co. of New York, which has the contract to rebuild the Atlantic Coast Line between Florence and Wadesboro, 65 miles, has established local offices in the Masonic Temple Building at Florence with Robert C. Chase in charge.

S. C., Greenville.—Arthur Pew of Atlanta will, it is announced, make a survey for the proposed Paris Mountain Electric Railway out of Greenville, about five miles. L. M. Hubbard of Greenville and others are interested.

S. C., Rock Hill.—Charter is granted to the Carolina Traction Co. of Rock Hill for a line from Rock Hill to Charlotte; another line from Rock Hill through Catawba, Lew-leville, Landsford and Rossville townships to connect with the Seaboard Air Line Railway. Other branches may be built in any direction not more than 30 miles from Rock

Hill. J. M. Cherry of Rock Hill, W. S. Lee of the Southern Power Co. and George Stephens of the American Trust Co., Charlotte, N. C., are the incorporators; capital \$150,000, which may be increased to \$500,000.

Tenn., Lafayette.—A. J. Bright, chief engineer, is reported to have completed the field work for the survey for the Westmoreland & Red Boiling Springs Railway.

Tenn., Memphis.—The Tennessee Traction Co. has filed its charter to build an interurban railway from Memphis to Nashville, about 190 miles, via Jackson, Tenn. George E. Bushnell of Indianapolis, Ind., is engineer and promoter. The other incorporators are W. K. Burton, Horace N. Smith, W. R. Gilbert, Sam R. Walker, J. H. Smith, R. A. Godwin, W. P. Holliday and C. B. Frazer; capital \$50,000.

Tenn., Shelbyville.—W. C. Frost, Nashville, Tenn., desires to get in touch with reliable railroad builders who might become interested in a plan for an electric railway between Shelbyville and Fayetteville, Tenn., 30 miles, on which 75 per cent. of grading is done and residents offer to take \$100,000 in stock. It is estimated that \$200,000 will build the road.

Tex., Abilene.—The proposed Abilene Short Line is to run from Abilene southeast about 55 miles, and a first-class road is to be constructed at an approximate cost of \$18,000 per mile. An organization is not yet perfected. Merchants and bankers of Abilene are backing the plan. H. J. Bradshaw is engineer.

Tex., Bartlett.—W. J. McDaniel, vice-president and general manager of the Bartlett & Florence Railway, is quoted as saying that 10 miles of grade have been completed and tracklaying will begin about November 10.

Tex., Brady.—The Fort Worth & Rio Grande Railway, Frisco system, will build 41 miles from Brady to Menardville, Texas. Several pile bridges and cast-iron pipe culverts will be required. The C. H. Sharp Construction Co. of Kansas City has the contract, and W. C. Beade, Brady, Tex., is engineer in charge. J. B. Berry, Chicago, Ill., is supervising engineer.

Tex., Cisco.—A movement is under way to organize a \$50,000 construction company to build the proposed Cisco & Santa Anna Southern Railroad. The Mayor of Cisco may be able to give information.

Tex., Rockport.—An officer is quoted as saying that the Rockport & Aransas Pass Railway Co. has finished preliminary surveys and secured capital and right of way for its proposed line from Rockport to the jetties at Aransas Pass, 11½ miles, but is waiting for the development of Government work before letting contract. C. G. Johnson is president; John H. Taylor, vice-president and general manager, and Percival & Son, engineers, all at Rockport, Tex.

Tex., Keltys.—President J. H. Kurth of the Angelina County Lumber Co. writes that the extension of the Angelina & Neches River Railroad beyond the Angelina River is not yet located and construction will not begin for several months. This refers to a recent press report.

Tex., Temple.—An officers writes that the interlocking work at Temple on the Santa Fe is only to protect the second new main track which is being constructed and which crosses the Missouri, Kansas & Texas Railway.

Tex., Timpson.—The Timpson & Northwestern Railroad is reported to have completed its extension from Timpson to Henderson, Tex.

Tex., Waco.—William L. Prather writes that company is not yet organized for line to connect Waco, Belton and Georgetown, Tex., 75 miles, via Moody, Salado and Cornhill. The plan is in charge of an executive committee. Engineer not yet selected.

Va., Monterey.—Survey is reported begun by Henry A. Slaven of Monterey upon the proposed railroad from the Chesapeake & Ohio Railway at Clifton Forge to Keyser, W. Va., on the Baltimore & Ohio, about 160 miles. As previously reported, J. J. Stoutenburgh of Hot Springs, Va., and others of New York are interested. A dispatch from Charleston says that the line has been chartered in West Virginia as the West Virginia Railway Co.; capital \$200,000.

W. Va., Berwind.—The Norfolk & Western Railway, it is reported, is about to call for bids on a 27-mile extension from Berwind through Cavetts Creek to a point near Tazewell, connecting with the Clinch Valley division. Survey has been made. C. S. Churchill is chief engineer at Roanoke, Va.

W. Va., Fairmont.—The Fairmont & Man-nington Traction Co., according to a dispatch, has completed its line into Man-nington and contemplates a further extension.

W. Va., Sistersville.—The Parkersburg &

Ohio Valley Electric Railway Co., it is reported, will complete its line from Sistersville to Friendly, W. Va. E. L. Benton of Sistersville is to finish survey.

STREET RAILWAYS

Ala., Birmingham.—The Birmingham & Edgewood Electric Railway Co. has let contracts to Dunn & Lallande Bros. of Birmingham to build three and three-quarter miles to complete its line through Shades Valley.

Ga., Brunswick.—The City & Suburban Railway, recently completed, six miles long, is now reported in operation. F. D. M. Strachan is president; Albert Fendig, vice-president; George H. Smith, secretary and treasurer; J. M. Armstrong, general manager and electrical engineer.

N. C., Asheville.—E. W. Grove will, it is reported, build an incline or counterweight railway from a point near the terminus of the Charlotte street-car line to the top of Sunset Mountain, at a cost of about \$30,000.

Tenn., Chattanooga.—W. E. Bolleau, general manager of the Chattanooga Railway & Light Co., referring to the recent mortgage filed, says that at present the company has not determined upon any extensions and improvements which have not already been contracted for.

Tex., Corpus Christi.—Tracklaying has begun. It is reported, on the six-mile line of the Corpus Christi Electric Street Railway; also work on the car barn.

Tex., Waco.—The Citizens' Street Railway Co. proposes to build a steel bridge over the Brazos River and not less than three miles of track on the east side.

Va., Lynchburg.—The Carroll-McGuire Construction Co. has begun work on the underground crossing preliminary to extending the street-car line to Fairview Heights.

Va., Lynchburg.—The People's Improvement Co. has closed a contract with the Lynchburg Traction & Light Co. to build an extension of about one mile to Fairview Heights, which will be operated by the traction company.

Va., Richmond.—Winston & W. O. Burton, both of Richmond, it is stated, are the sub-contractors of the Blake Construction Co. of New York for the viaduct and line of the Richmond & Henric Railway Co. W. S. Forbes is president of the railway; W. F. Jenkins, vice-president; John C. Hagan, secretary and treasurer, and Samuel L. Kelly, general counsel.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery and supplies wanted.

Art Glass.—L. S. Grandy, Easley, S. C., wants prices on art glass for \$7500 church.

Asbestos Shingles.—Boyd & Huff, 314 North Charles St., Baltimore, Md., want prices on asbestos shingles.

Automobiles.—J. W. Lee, Cochran, Ga., wants catalogues and prices on automobiles.

Belting.—Southern Equipment Co., 19 Young St., Houston, Tex., wants belting; new or second-hand.

Belts.—Bexar Gin & Mill Co., J. W. Webb, secretary, R. F. D. No. 2, Ripley, Tenn., wants prices on belts for sawmill.

Boller.—Big Rock Stone & Construction Co., 111 Center St., Little Rock, Ark., wants 100-horse-power new boiler.

Brick Machinery.—National Stone & Brick Co., Columbian Bldg., Washington, D. C., will open machinery proposals about November 10 on complete equipment for sand-lime and clay-brick plant of 50,000 to 75,000 daily capacity. Address Albert S. Hicks, president, Takoma, D. C.

Bridge.—P. St. J. Wilson, State Highway Commissioner, Richmond, Va., will receive bids until November 8 for construction of two steel bridges in Appomattox county;

one beam span 35 feet over Falling Creek and one beam span 30 feet over Reedy Creek; plans and specifications on file at office of State Highway Commissioner and at office of Clerk Appomattox County; certified check for \$250 must accompany each bid.

Bridge Construction.—Bids will be received at office of P. St. J. Wilson, State Highway Commissioner, Richmond, Va., until November 13 for construction of steel bridge near Planagan's Mill, Cumberland county; one span 61 feet 6 inches long; plans and specifications on file at office of State Highway Commissioner and of Clerk of Cumberland County, Cumberland, Va.; certified check, \$250; further information on application at office of State Highway Commissioner.

Bridges.—Francis-Shepard Company, 246 Woodward Bldg., Birmingham, Ala., wants several steel bridges, E-35 to E-45, live load specifications.

Building Materials.—Simons-Mayrant Company, general contractors, 16 Broad St., Charleston, S. C., wants estimates for structural and ornamental steel and iron, fireproofing, ornamental terra-cotta, plastering, painting, heating, plumbing, electric work, roofing, sheet-metal work, exterior and interior marble work, and all other items entering into construction of eight-story office building at Charleston, S. C. in accordance with plans and specifications by Thomson & Froling, 114 East 28th St., New York.

Building Materials.—H. A. Hayes, superintendent Children's Home, Winston-Salem, N. C., wants prices on materials for \$25,000 brick building, combining dormitory, dining-room, kitchen, laundry, office, etc.

Building Material.—East & Hobbs, 614-615 Law Bldg., Norfolk, Va., lowest bidders at \$184,437 for erection of school, want prices on building material, construction, etc., on that building.

Cant-hook Supplies.—Queen City Manufacturing Co., 2512 Front St., Meridian, Miss., wants cant-hook supplies.

Cars.—Southern Equipment Co., 19 Young St., Houston, Texas, wants 40 logging cars; standard gauge; new or second-hand.

Cars.—See "Logging Equipment."

Coal-handling Machinery.—Gulfport & Mississippi Coast Traction Co., W. F. Gorenflo, superintendent, Gulfport, Miss., wants coal-handling machinery.

Church Furnishing.—James A. Foard, Caledonia, Mo., wants prices on church furnishings.

Condenser Apparatus.—John D. Kelley, City Secretary, Galveston, Tex., will receive bids until November 11 for furnishing condenser apparatus, including jet condenser, two pumps and all necessary piping from exhaust side of engine and from receiver tank, in order to secure vacuum of from 27 to 28 inches on exhaust from two 100-kilowatt General Electric turbines; temperature of water, 85 degrees Fahrenheit; average of available cooling water, 1,000,000 gallons per 12-hour night. Bidders should clearly specify and describe apparatus covered by bid and submit guarantee vacuum; certified check, \$100; details and specifications may be had upon application to W. D. Masterson, city superintendent of electricity.

Conveying Machinery.—See "Sand Plant."

Conveying Machinery.—Solomon-Norcross Company, 1622 Candler Bldg., Atlanta, Ga., wants information and cost on improved machinery for handling freight on waterways from barges and lighters to railway cars and wharf sheds.

Conveying Machinery.—See "Coal-handling Machinery."

Corn Flake Machinery.—J. W. Kittrell of Kittrell & Graham, Durant, Okla., wants prices and information on machinery for manufacturing corn flakes and puffed rice.

Cotton Gln.—Western Cotton Oil & Gin Co., Haskell, Tex., wants 10-stand gin outfit.

Crane.—St. Louis Rail & Equipment Co., 1208-9 Third National Bank Bldg., St. Louis, Mo., wants 10-ton standard-gauge locomotive crane with 25 or 30-foot boom; must be equipped with double drum so that it can handle line for magnet; crane equipped with magnet preferred.

Cranes.—Samuel T. Williams, 223 North Calvert St., Baltimore, Md., wants two traveling cranes, three-motor electric; 60-foot span of 20-ton lift and 35 to 40-foot span of 5 to 10-ton lift; to use 125 or 250-volt current.

Crushing Machinery.—See "Sand Plant."

Cutting Dies.—Frank C. Simson, Simson Bldg., Halifax, Canada, wants dies to cut fannel and manila paper in letters and figures of ordinary size.

Dies.—See "Cutting Dies."

Drainage.—Lafayette, Tenn., wants bids on draining natural pond; will require placing

of 1000 to 1200 feet of 8 or 10-inch pipe; address A. R. Harlan, Mayor.

Dredging.—United States Engineer Office, Room 309 Custom-house, Baltimore, Md., Proposals for dredging in Chesapeake Bay, York Spit section of channel, to Baltimore, Md., will be received until November 30; information on application; W. E. Craigbill, Major, Engineers.

Dredging Machine.—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad St. and South Penn Sq., Philadelphia, Pa., wants dredging machine that will cut trench about 10 feet deep, 12 to 18 inches wide.

Drykiln.—Southern Equipment Co., 19 Young St., Houston, Tex., wants drykiln; new or second-hand.

Electric-light Plant.—Roy Alexander, secretary M. O. & G. Immigration Co., Dustin, Okla., wants names and addresses of contractors for installing electric-light plant.

Electric Plant.—Box 63, Spearville, Kans., wants proposals on electric-light and power plant machinery and supplies.

Electrical Machinery.—Broadax Power Co., subsidiary to United States Guaranty Co., John V. Ryan, president, 28 Royal St., Mobile, Ala., will want about \$50,000 worth water-power-electrical machinery.

Electrical Machinery.—D. E. Sigmon & Bro., Newton, N. C., want dynamo to furnish about 40 lights; second-hand preferred.

Electrical Machinery.—Samuel T. Williams, 223 North Calvert St., Baltimore, Md., wants 50-kilowatt generator unit; 125 volts; steam pressure, 80 pounds.

Elevator.—H. A. Keppel, 124 Washington Ave., Memphis, Tenn., wants bids on sidewalk elevator.

Engine.—Samuel T. Williams, 223 North Calvert St., Baltimore, Md., wants 15-horsepower engine; to operate small dynamo by belt.

Engine.—D. E. Sigmon & Co., Newton, N. C., want 6-horse-power engine to drive small dynamo; second-hand preferred.

Engine.—Big Rock Stone & Construction Co., 111 Center St., Little Rock, Ark., wants second-hand automatic or Corliss engine (left-hand preferred); 300 to 350 horsepower.

Engine.—Western Cotton Oil & Gin Co., Haskell, Tex., wants 16x36 Corliss engine for oil mill.

Engine and Boiler.—I. M. De Pew, Palma Sola, Fla., wants 6 to 10-horse-power engine and boiler; boiler should be large enough to burn wet sawdust; second-hand preferred.

Engine and Boilers.—Southern Equipment Co., 19 Young St., Houston, Tex., wants 100 to 150 horse-power engine and boilers; new or second-hand.

Engine and Pump.—Wellington Water, Light & Ice Co., Wellington, Tex., wants engine and pump to supply water for 2600 inhabitants.

Feather-renovating Machine.—Spartanburg Mattress Works, 139 South Church St., Spartanburg, S. C., wants feather-renovating machine.

Fertilizer Machinery.—See "Mixer."

Fire Apparatus.—General Depot of Quartermaster's Department, M. Gray Zalinski, Major and Quartermaster, Depot Quartermaster, Washington, D. C. Sealed proposals in triplicate will be received until December 1 for furnishing fire apparatus at various posts of United States Army: 24 chemical fire engines, 11 gasoline fire engines, 1881 fire-extinguishers, 27,380 feet of 2½-inch fire hose, hook-and-ladder trucks, etc. Information furnished on application.

Friction Paper.—A. J. Baldwin & Co., 102 Main St., Dawson, Ga., want prices on friction paper for manufacturing friction wheels.

Glass Bottles.—W. H. Schroeder, 330 Highland Ave., Atlanta, Ga., wants to correspond with manufacturers of glass bottles.

Groyne Construction.—Bids will be received by Board of Commissioners of Galveston, Tex., at office of City Secretary John D. Kelley, and another set by County Auditor of Galveston county, John M. Murch, acting for County Commissioners, until November 11 for furnishing material and constructing groynes across Galveston beach at points between 6th and 39th streets, as may be designated by City Engineer A. T. Dickey; plans, details and specifications prepared and on file in office of City Engineer, from whom copies can be obtained and any further information desired on application. Groynes proposed to be constructed of creosoted timber, requiring following quantities: 1176 pieces of 4-inch by 12-inch by 16-foot creosoted piling; 54,000 feet board measure 4-inch by 12-inch by 16-foot creosoted planking; certified check.

Haugers, etc.—Southern Equipment Co., 19

Young St., Houston, Tex., wants hangers and shafting; new or second-hand.

Heating and Power Plant.—State Board of Public Affairs, Guthrie, Okla., will receive proposals until November 22 for complete installation of heat and power plant at Hospital for Insane at Supply; plans and specifications furnished by P. H. Weathers, architect, Guthrie, Okla.; plans and specifications may be seen at office of E. G. Newell, superintendent, Supply; of State Board of Public Affairs, and of architect State Board, Guthrie, Okla.; bidders shall include in proposal two-ton ice-making plant to be installed in said building, plans and specifications for which shall accompany proposal; proposals shall be submitted in duplicate on forms furnished to bidders by architect; certified check, 5 per cent. of total amount of highest proposal submitted by bidder; bids to be addressed to T. A. Chandler, acting secretary, Guthrie; Roy Hoffman, chairman of Board.

Heating Plant.—H. A. Keppel, 124 Washington Ave., Memphis, Tenn., wants bids on hot-water heating plant.

Heating Plant.—L. S. Grandy, Easley, S. C., wants prices on steam or hot-air heat for \$7500 church.

Hoisting Engine.—Turtle Lumber Co., Columbus, Miss., wants second-hand D. D. D. C. 25 or 30-horse-power hoisting engine, with slewing drums and derrick irons.

Hoisting Engine.—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad St. and South Penn Sq., Philadelphia, Pa., in market for 50-horse-power mine hoisting engine; single drum, double cylinder.

Ice Plant.—C. A. Gilman, Fitzgerald, Ga., wants 15-ton ice plant.

Ice Plant.—Box 63, Spearville, Kans., wants proposals on ice-plant machinery and supplies.

Ice Plant.—See "Heating and Power Plant."

Locomotive.—See "Logging Equipment."

Logging Equipment.—James A. Dezell, Greensboro, Fla., wants to rent logging equipment, comprising standard-gauge locomotive and about six cars.

Lumber.—G. Elias & Bro., 965 Elk St., Buffalo, N. Y., want one carload each of 1 and 1½-inch firsts and seconds brash (white oak) for export.

Match-making Machinery.—E. K. Viator & Co., P. O. Box 555, Richmond, Va., wants names of manufacturers of wood and wax match-making machines.

Mica Mills, etc.—R. Ed Holland, Boonford, N. C., wants to correspond with manufacturers of mica mills; also with consumers of milled and sheet mica.

Milling Machinery.—See "Corn Flake Machinery."

Mixer.—Chas. T. Schmitt, 39 Cortlandt St., New York, wants mixer; automatic feed and discharge; one ton capacity; for fertilizers; new or second-hand.

Mixer.—J. G. Cooner, Batesburg, S. C., wants small fertilizer mixer for home mixing.

Navy-yard Supplies.—Proposals will be received at Bureau of Supplies and Accounts, E. B. Rogers, Paymaster-General, U. S. N., Navy Department, Washington, D. C., until November 16 to furnish at Navy-yard, Washington, quantity of naval supplies, as follows: Schedule 1867—Spindle milling machine and accessories. Schedule 1875—Cases, pliers, flags, scissors, belts. Schedule 1876—Pipe and fittings. Schedule 1877—Naval bronze, brass rod, sheet brass, poplar, pine. Schedule 1878—Hardware and tools. Schedule 1896—Steel tubes. Applications for proposals should designate schedules desired by number. Blank proposals furnished upon application to bureau.

Paving.—City Council, New Decatur, Ala., will receive bids until November 9 for paving Second, Fourth, Sixth and Eighth avenues, Johnson and Grant streets and Gordon drive; plans, profiles and specifications on file in offices of Henry Hartung, City Clerk, and of City Engineer; E. C. Payne, Mayor.

Paving.—T. J. Powell, Mayor, Lake Providence, La., will receive bids until November 15 for construction of two miles of concrete sidewalks.

Paving.—Bob Farman, City Clerk, Oklahoma City, Okla., will open bids November 8 for construction of certain sidewalks; certified check for 2 per cent. of bid; Bob Farman, City Clerk.

Paving.—Bids will be received at office of Ennis M. Doughlass, City Register, Memphis, Tenn., until November 5 for grading and paving work: Scimitar alley, 2000 square yards grading, with concrete pavement; East Bates alley, 2000 square yards grading, with concrete pavement; North Center lane, 1250 square yards grading, with vitrified brick

paving on concrete foundation; Pidgeon alley, 550 square yards grading, with vitrified brick paving on concrete foundation; profile and specifications on file at office of City Engineer; certified check \$250; James H. Malone, Mayor.

Paving.—A. J. Hawkins, City Engineer, North Birmingham, Ala., will receive bids until November 9 for grading, macadamizing, laying concrete sidewalks and gutters, granite curb on 22d street, between 35th and 36th avenues and on 36th avenue from 22d to 21st streets; each bid must be accompanied by certified check to amount of \$250 and made payable to City Council of North Birmingham; right to reject any and all bids is hereby reserved; specifications may be obtained and plans examined at engineer's office in City Hall of North Birmingham.

Paving, etc.—Board of Public Works, Paducah, Ky., will receive bids until November 23 for construction of 96,500 square feet concrete sidewalks, 17,620 linear feet granite curbing, 17,620 linear feet concrete gutter, 7250 square feet concrete driveways and 1700 linear feet cast-iron drainpipe; certified check, \$250; plans, specifications, etc., on file at office of L. A. Washington, City Engineer.

Pipe System.—Sealed proposals, indorsed "Proposals for Pneumatic Pipe System," will be received at Bureau of Yards and Docks, Navy Department, R. C. Hollyday, chief, Washington, D. C., until November 27 for extending pneumatic-pipe system, Charleston, S. C. Plans and specifications can be obtained on application to bureau or to commandant of navy-yard named.

Pulleys.—Bexar Gin & Mill Co., J. W. Webb, secretary, R. F. D. No. 2, Ripley, Tenn., wants prices on pulleys for sawmill.

Pump.—See "Engine and Pump."

Rails.—Lauro M. Guerra y Hermano, 2a De Nuevo Mexico No. 58, City of Mexico, wants 600 tons second-hand 20-pound rails; c. i. f. Progreso, Yucatan.

Rice Mill Machinery.—See "Corn Flake Machinery."

Rails.—Francis-Shepard Company, 246 Woodward Bldg., Birmingham, Ala., is interested in purchase of about 20 miles relaying rails; about 60-pound section or heavier.

Road Construction.—Sullivan County Road Commission (John H. Caldwell, John W. Swadley and John G. Preston), Bristol, Tenn., will open bids November 15 for grading and macadamizing 60 miles of roads; bids will be received for work as whole and for grading, masonry, bridging, tiling, etc., attendant upon making graded road, under one head, and macadamizing under separate head; roads to be built will be laid off in sections and bids will be received as above for separate sections; profiles and specifications can be seen in office of County Engineer, F. G. Phillips, Bristol; certified check for 2 per cent. of aggregate bid.

Road Machinery.—City of Big Stone Gap, Va., will buy 10-ton roller; also rock crusher of good capacity; John W. Chalkley, chairman Street Committee.

Road Rollers.—Lawrence Machinery & Supply Co., Arcade Bldg., Philadelphia, Pa., wants two five-ton tandem road rollers.

Roofing.—Newville Mercantile Co., Newville, Ala., wants prices on roofing or gravel.

Roofing.—I. M. De Pew, Palma Sola, Fla., wants roofing; not metal.

Safe, etc.—Union Bank & Trust Co., Searcy, Ark., wants prices on safe and bank fixtures.

Sand Plant.—Brady & Morfit, Fairmont, W. Va., want glass-sand plant, including crushing, grinding and conveying machinery; capacity, 150 tons per 10 hours.

Sash and Door Machinery.—Standard Sash, Door & Blind Manufacturing Co., 621 St. Mary St., New Orleans, La., wants machinery for sash and door plant. (See "Woodworking Machinery.")

Sawmill.—Bexar Gin & Mill Co., J. W. Webb, secretary, R. F. D. No. 2, Ripley, Tenn., wants prices on circular saw, belts, pulleys, etc., for mill of 8000 to 10,000 feet capacity daily.

Sawmill Equipment.—See "Woodworking Machinery."

Seating.—James A. Foard, Caledonia, Mo., wants prices on pews.

Seating.—L. S. Grandy, Easley, S. C., wants prices on pews for \$7500 church building.

Sewer Construction.—Wheelock Engineering Co., 711 Farley Bldg., Birmingham, Ala., will open bids November 8 for construction of certain sanitary sewer mains at Pratt City, Ala.; plans and profiles may be examined and specifications obtained at above office and of City Clerk, Pratt City.

Sewer Construction.—W. B. Jones, City

INDUSTRIAL NEWS OF INTEREST

The Baker Ice Machine Co.

Clerk, Ada, Okla., will open bids November 15 for construction of lateral sewers in Districts Nos. 1 and 2; plans and specifications on file in office of City Clerk; each district to be bid on separately; certified check, 3 per cent. of bid.

Sewer Construction.—Bids will be received at office of Bob Parman, City Clerk, Oklahoma City, Okla., for construction of Kate avenue storm-sewer system, Kelly and Laird avenues storm-sewer system and East Side main sanitary-sewer system; each sewer to be bid on separately; also until same date for construction of lateral sewer in Riverside Addition, South Park Addition and South Riverside Addition; plans and specifications on file in office of City Clerk; certified check for 3 per cent. of bid.

Shears.—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad St. and South Penn Sq., Philadelphia, Pa., in market for new or second-hand shears; motor-driven preferred; to shear 10-inch angles and 12-inch channels.

Steel Cages.—T. W. Keith, City Clerk, Hallettsville, Okla., wants two steel cages for jail.

Tanks.—Western Cotton Oil & Gin Co., Haskell, Tex., wants four steel storage tanks, 10 feet diameter, 14 feet high, for cottonseed oil.

Telephone Equipment.—J. A. Clement, Citizens' Telephone Co., Dickson, Tenn., wants prices on telephones and material necessary in construction of 200 or 300-line system.

Tool Manufacturers.—G. H. Waters Tool Co., Box 209, Greer, S. C., wants to let contract for manufacture of combination carpenter tool, consisting of divider and gauge; made of steel and nickel-plated.

Viaduct Construction.—Bids will be received by Board of Public Works at office of John W. Flenniken, chairman, Knoxville, Tenn., until November 9 for building of reinforced concrete viaduct over Second Creek and tracks of L. & N. and Southern railways on Asylum avenue; length 1100 feet; width 40 feet; Crenshaw & Co. of Knoxville, engineers.

Wagon Skins.—Queen City Wagon Manufacturing Co., 2512 Front St., Meridian, Miss., wants steel and cast wagon skins.

Wall Ties.—L. S. Grandy, Easley, S. C., wants prices on wall ties for pressed brick.

Water Heater.—Edward Tonneller, Benton Harbor, Mich., wants water heater heated by sun's rays.

Water-power Machinery.—Broadax Power Co., subsidiary to United States Guaranty Co., John V. Ryan, president, 28 Royal St., Mobile, Ala., will want about \$50,000 worth of water-power-electrical machinery.

Water-works.—Roy Alexander, secretary M. O. & G. Immigration Co., Dustin, Okla., wants names and addresses of contractors for installing water-works.

Water-works.—Box 63, Spearville, Kans., wants proposals for water-works machinery and supplies.

Water-works.—See "Engine and Pump."

Well Drilling.—Office Constructing Quartermaster, Fort Sill, Okla. Proposals will be received until November 10 for sinking tubular deep well at Fort Sill. Specifications, proposal blanks and further information furnished on application to Capt. David L. Stone, U. S. A., Constructing Quartermaster.

Woodworking Machinery.—A. E. Holman, manufacturers' agent, Augusta, Ga., wants catalogues on sash, blind and scroll-work machinery.

Woodworking Machinery.—Southern Equipment Co., 19 Young St., Houston, Tex., wants two cut-off saws, 8-inch side moulder, single-end tenoner, 52-inch sander, chain mortisers, woodworker and grinding machine; hand resaw, gauge about 40,000 capacity; trim or edging saw, two rip saws, two stickers, double-end tenoner, bandsaw, double and single surfacer, glueing and clamping machine, foot-treadle cut-off saw, etc.; new or second-hand.

Woodworking Machinery.—See "Sash and Door Machinery."

Woodworking Machinery.—I. M. DePew, Palma Sola, Fla., wants large sander, with vertical shaft preferred; band saw with guide 8 inches above table; wood-turning lathe 4 feet between centers, 16-inch swing, hand, automatic feed or head and tail stock; second-hand preferred.

Woodworking Machinery.—J. O. Brown, Bedford City, Va., wants second-hand complete machine for making octagonal split locust tree nails; random sizes and lengths.

Saginaw Manufacturing Co.

The Saginaw (Mich.) Manufacturing Co., manufacturer of pulleys, announces that its Chicago Office address has been changed to 105-109 North Canal St.

At a recent meeting of the stockholders of the Larsen-Baker Ice Machine Co. of Omaha, Neb., it was unanimously voted to amend articles of incorporation by changing the name of the company to the Baker Ice Machine Co.

Civil Engineer Wants Position.

A graduate civil engineer desires a position with an engineering and contracting company. He states he is experienced in sewer design and construction, municipal engineering and railroad work. Address "B. J." care Manufacturers' Record.

Installing Corliss Engine.

Among orders for equipment which have recently been received by the Minneapolis Steel & Machinery Co. of Minneapolis, Minn., is one from the Martin Pressed Brick Co. of Marlin, Tex., for a 12x30-inch Twin City Corliss engine, now being installed.

For Manufacturing Artificial Marble.

A new process for manufacturing artificial marble is now available, and information concerning it may be obtained from G. G. Fry, Indianapolis, Ind. This process describes the uses of artificial marble, aggregates used for the products desired, coloring, the manufacture of marble tiling and wainscoting, mixing and pouring, marbleizing and other essentials.

Konkreto for Cement Floors.

A preparation which is claimed to be effective for the elimination of dust on concrete, granolithic and cement floors is known as Konkreto. This product is manufactured by the Standard Waterproofing Co. of Indianapolis, Ind., and is said to sink deep into the material, giving it a tough, hard, smooth surface, which feels like hard rubber and cleans like tile.

Concrete Engineer Offers Services.

A concrete engineer of extensive experience in civil engineering and building seeks a new position, preferably in the South. He is now employed by a well-known construction company and desires to become connected with an architect and contractor. Letters addressed to "Concrete," care of Manufacturers' Record, will be forwarded.

Manufacturers' Agent and Contractor

Manufacturers of asbestos packings, galvanized roofings, etc., desirous of establishing a Southern connection are invited to communicate with P. F. Strleman, general contractor, 629 Baronne St., New Orleans, La., who is soliciting agencies for the sale of these materials. Mr. Strleman has been associated with the H. W. Johns-Manville Company for a number of years and is familiar with asbestos packings, pipe coverings, roofings, etc.

Frogs, Switches and Track Work.

General catalogue No. 1, containing valuable information with designs and specifications of frogs, switches and track work of all kinds, has been issued by the St. Louis Frog & Switch Co., Chemical Bldg., 8th and Olive Sts., St. Louis, Mo. This company manufactures all classes of track work for steam, electric and industrial railways, including spring frogs, crossing frogs, split switches, switch stands, etc., full details of which are found in the catalogue referred to.

Will Use Concrete for Sewer.

It is announced that the city of Denver, Col., has awarded a contract for the construction of the West Denver storm sewer. This sewer will be constructed of concrete pipe, 24 inches in diameter and will cost, it is stated, \$1.03 per foot, which is said to be cheaper than vitrified pipe of the same size. In this connection the Miracle Pressed Stone Co., Minneapolis, Minn., has been awarded contracts for furnishing cement molds and equipment to the value of \$1500, which will be used to make the cement pipe for the sewer.

The United States Rail Co.

Receivers for the Maryland Rail Co. of Cumberland, Md., were recently discharged by the court, and the company has reorganized as the United States Rail Co., with H. H. Dickey president, Harry E. Weber first vice-president, W. Milnor Roberts, Jr., second vice-president and Thomas Shannon secretary-treasurer. The board of directors is composed of the officers, George M. Shriver and J. D. McCubbin, Jr., of the Baltimore & Ohio Railroad Co., J. P. Kelly of the American Steel Co., Pittsburg, Pa., and Henry Shriver. The company has begun operations

and is manufacturing from 8 to 40-pound light steel rails.

The Pintsch System for Harbor and River Lighting.

As an evidence of the popularity of the Pintsch system for harbor and river lighting the United States Lighthouse Board has recently closed a contract for 18 B-III Pintsch gas buoys complete with lanterns and 20 additional Pintsch gas-buoy lanterns. The entire 38 lanterns are to be supplied with the inverted incandescent mantle, which has given successful service, and is claimed to increase many times the projecting power of the lantern heretofore used. The contract referred to was awarded the Safety Car Heating & Lighting Co., 2 Rector St., New York, which manufactures the Pintsch lighting system, water-circulating and direct steam-heating systems.

Good Demand for Electrical Supplies and Material.

In common with other lines of trade there has recently been a notable advance in the Southern demand for electrical supplies and construction material. The Baltimore Electrical Supply Co., W. J. Flannery, president, 215 North Calvert St., Baltimore, Md., jobbers of electrical supplies, etc., by reason of its growing Southern trade, has found it necessary to enlarge its establishment several times to make room for a large and assorted stock. Among the companies which it represents in the South are the Phillips Insulated Wire Co., Colonial Fan & Motor Co., Colonial Incandescent Lamp Co., H. T. Paiste Company, De Veau Telephone Co. and the National India Rubber Co.

Establishes Agency in Washington State.

Evidence that Southern firms are not confining their field of industry to Southern territory is indicated by the fact that a company of Greensboro, N. C., has recently established an agency in the State of Washington. This is the Newman Machine Co. of Greensboro, N. C., manufacturer of improved woodworking machinery, and recently made a shipment of machinery to the Caldwell Bros. Company, Seattle, Wash., which will hold the agency. The shipment is said to be the first carload of woodworking machinery ever shipped from North Carolina, and consists of one large 12-inch molder, two No. 8 planers and matchers, one No. 11 planer and matcher, four resaws, one self-feed rip saw, three swing cut-off saws, one lathe mill and bolter and one lathe blinder and trimmer.

Sales Increasing and Prospects Bright

Among Southern companies whose sales have materially increased throughout the cotton belt by reason of the high price of cotton and the general revival of trade is the Rock Hill Buggy Co. of Rock Hill, S. C. Its salesmen are sending in a satisfactory number of orders, and prospects are bright for the remainder of this year and next. The company has transferred A. J. Eley of Barnesville, Ga., who has been manager of sales for the Carolinas for the past three years, to Georgia and Florida, succeeding J. M. Cochran, who has taken charge of the home office as manager of sales. R. D. Topp of Atlanta, Ga., has succeeded Mr. Eley as manager of sales for the Carolinas and Virginias, while S. E. Conyers of Montgomery, Ala., still remains manager of sales for Alabama and Mississippi.

"Clisco" Tools.

The Cincinnati Iron & Steel Co., Cincinnati, Ohio, has developed its machinery and equipment department to the point where it has the control of five manufacturing plants, with its own superintendent in each, producing 11 different machines. These include engine lathes, bar benders, sensitive drills, lathe swing attachment, floor cranes and hand-power cranes, power punches, shears, hand-power bending rolls, "Clisco"-Sibley up-right drills and "Clisco"-Nugent clutches. All these are produced as the "Clisco" line. The "Clisco" engine lathe is now being made in 14-inch sizes, the output being 96 per month, while 16-inch, 18-inch, 21-inch and 24-inch sizes will follow. These lathes are built from original designs of William Bishop, who is manager of the department. At present this department is prepared to supply complete lathes, accessories and boiler-shop equipment through dealers.

The Franz Safe & Lock Co.'s Orders.

Among the progressive firms of Florida is the Franz Safe & Lock Co. This company handles a complete line of fire and burglar proof safes and furnishes steel furniture,

steel filing cabinets and general jail work. It has recently received a number of important contracts, including one from the Atlantic National Bank of Jacksonville for vaults, steel fixtures, furniture, etc., costing \$30,000; Valusia County Bank, Deland, Fla., vaults and fixtures; Crescent City (Fla.) Bank, vaults and fixtures; Bank of Palm Beach, Fla., vaults and fixtures; St. Lucie county courthouse, Fort Pierce, Fla., fire-proof vaults and steel furniture; Palm Beach (Fla.) county courthouse, vaults and steel furniture; Fort Meade (Fla.) Bank, vaults and fixtures; Seminole Hotel, Jacksonville, vaults. The company distributes the products of the Diebold Safe & Lock Co. in Georgia and Florida, and maintains salesrooms and offices at 108 Main St., Jacksonville, and 201 Madison St., Tampa, Fla.

Pratt Engineering & Machine Co.

The Pratt Engineering & Machine Co., Atlanta, Ga., has removed its New York offices to Rooms 2002, 2004 and 2005 Singer Bldg., 149 Broadway. R. E. S. Geare, assistant sales manager, will be in charge and will be assisted by N. A. Helmer, export sales manager. The Pratt company recently succeeded to a long-established business in designing and building machinery and appliances for sulphuric acid and fertilizer works, manufacturing pulverizing machines, steam pumps and centrifugal dredging pumps of its own design. It also manufactures machinery for cane-sugar plants and builds and installs complete plants. Mr. Helmer is chief engineer of the sugar-machinery department. The new plant at Atlanta is a model of its kind and includes shops for the fabrication and erection of all classes of heavy, light and special work. It is also provided with splendid testing shops. The machines are driven by individual electric motors and the shops are served by powerful electric cranes.

The Modern Business College.

Educational facilities of every character have been improved and extended during recent years. They are given close attention so that students may derive the greatest benefit from their tuition and attain a knowledge of those particular studies or practices required in the business or profession they contemplate engaging in. One of the most useful of modern schools is the business college, which now plays an important part in the educational world. A leading institution of this class is the Eaton & Burnett Business College, 9 and 11 West Baltimore St., Baltimore, Md. This college invites investigation of its methods, which have been taught to many who are now successful business men in the South. It instructs students in general, corporation and voucher bookkeeping, Pitman's shorthand writing, touch typewriting, banking, etc. The Eaton & Burnett College has not only a day course, but also a night school, where boys and men who are now employed may perfect themselves in any chosen branch.

Exhibiting the Watson Wagons.

The exhibit of the Watson Wagon Co. of Canastota, N. Y., at the National Congress of Road Builders held at Columbus, Ohio, October 26-28, was in charge of W. N. Winslow, special representative. The company showed its dumping wagon with its feature of dovetailing so well done as to conceal the joints. A specialty of this wagon is the stub pole for short-coupling wagons together for hauling behind a traction engine. It is provided with a stout coil spring that effectually takes up the jar and recoil when starting or stopping, while an added feature is that this stub pole is connected to a wrought-iron brace securely bolted to the end and sides of the wagon so that the strain does not come on the endboard, but is carried around to the sides of the wagon. In its 22 years of existence the company has had during 1909 the largest trade it has ever enjoyed. Watson wagons are now sold and used all over the world, some of the largest shipments being made to Cuba, South America and South Africa.

Will Build \$3,000,000 Plant.

Justified by trade conditions and other considerations, the American Rolling Mill Co. of Middletown, Ohio, George M. Verity, president and general manager, has decided to greatly enlarge its present facilities. It has increased its capital stock and made financial arrangements for the erection of a new plant to have a capacity of more than twice that of its present plant and employ from 1000 to 1200 workmen. The company's plant at Zanesville, Ohio, is a finishing mill, while the Middletown plant does similar work, but with much more extensive facilities for the manufacture of corrugated-iron sheet metal, building materials of all kinds, as well as

three different styles of patent metal lath and corrugated culverts and water flumes. With the erection of the new plant it is intended to make the Zanesville and Middletown plants finishing mills, while the new plant will produce material for them. The location for the new mill has not been determined, but it is announced that consideration is being given to Middletown, Hamilton, Zanesville, Cleveland, Ashtabula and Toledo. The company manufactures basic open-hearth steel, steel sheet bars, American Ingot Iron and other special chemical test black sheets, galvanized sheets, steel sheet building materials, etc. It will expend about \$3,000,000 for the erection and equipment of its new plant.

Premium System for Bell Boys.

A new system for bell boys, introduced by the Lodge & Shipley Machine Tool Co., Cincinnati, O., has proven efficient as a time saver for the employees of the plant. The company has used bell boys to carry messages about the shop and to run errands for the foreman to and from the stock and tool room, and while there were apparently enough boys, there were numerous delays in responses to the bell, forcing the men to lose time. In order to improve the system the trips made by each boy were counted, and it was found that the average number of trips per day amounted to about 50. The boys were told that they were making an average about 50 trips per day, and this was all the company expected of them, but that a system had been arranged to count the number of trips each boy made, and for each trip over 50 one-half cent would be paid. This plan has been highly successful, and some of the boys now make over 100 trips per day, the result being that there are no delays and the management has been enabled to institute a shop rule that the foreman is not to leave his department. The Lodge & Shipley Machine Tool Co. has also introduced the factory pass, a blue circular celluloid badge or button, which has been found of great convenience, enabling visitors to the plant to go about unmolested, besides obviating the necessity of some of the office force escorting visitors.

York Manufacturing Co.'s Sales.

Among the recent sales of the York Manufacturing Co. of York, Pa., manufacturer of ice-making and refrigerating machinery, are the following: Palmetto Ice Co., Palmetto, Fla., on 60-ton ice-making plant; Merchants' Ice & Cold Storage Co., Los Angeles, Cal., one 100-ton cross-compound machine and compression side; St. Louis Brewing Association, St. Louis, Mo., one 175-ton tandem compound machine and compression side for Hyde Park Brewery and one 125-ton compression side for Wainwright Brewery branch; city of Paris, Tex., one 10-ton refrigerating plant; P. C. Lofland, Snow Hill, Md., one 6-ton ice-making plant; J. M. Horton Ice Cream Co., New York city, one 90-ton and one 60-ton refrigerating plant for a new factory; Roberts Cottonseed Oil Co., Houston, Tex., one 25-ton ice-making plant; Holio Ice & Cold Storage Co., Holio, P. I., two 11-ton refrigerating machines and one 10-ton ice-making plant; Ice Rink Co., Chicago, Ill., two 90-ton refrigerating machines and piping for skating rink; East Coast Lumber Co., Watertown, Fla., one 8-ton refrigerating plant; Empire Scale & Fixture Co., Jacksonville, Fla., one 8-ton refrigerating plant for American Produce Co.; Philadelphia Warehousing & Cold Storage Co., Philadelphia, Pa., one 175-ton cross compound machine and 42 sections of condensers and connections; Hamlet Ice Co., Hamlet, N. C., one 50-ton ice-making plant.

Active Trade of National Paint Works

In addition to supplying its regular customers, including the Pennsylvania Railroad, Philadelphia & Reading, New York Central, New York & New Haven, Southern Railway, Seaboard Air Line, Norfolk & Western and other large consumers, the National Paint Works of Williamsport, Pa., has recently furnished or will furnish paint for a large amount of new work. This embraces 6300 gallons of N. P. W. No. 16 carbon black paint, No. 401 carbon and oxide and No. 400 pure carbon black for steel bridges for the Carolina, Clinchfield & Ohio Railway; N. P. W. No. 16 carbon black for approximately 4000 tons of steel for the Virginia & Southwestern; Bureau of Engraving and Printing, Pekin, China; Milburn, Helster & Co., Washington, D. C., architects; Goff Building, Clarksburg, W. Va., same architects; Wachovia Bank Building, Winston-Salem, N. C., same architects; steel shop of West Virginia Pulp & Paper Co., Piedmont, W. Va.; F. G. Ten Broeck, engi-

neer, and Riter-Conley Company, contractors; for 1000 tons of steel work of the same company at Covington, Va., same architect, and erected by Virginia Bridge & Iron Co., and for Cumberland River bridges, Nashville, Tenn., H. M. Jones, engineer, Nashville, steel fabricated by American Bridge Co. and erected by Foster-Creighton-Gould Company. The National Paint Works has also furnished paint for special purposes for large industrial enterprises, and owing to increased trade has recently added extensively to its facilities. The Southern sales manager of this company is W. B. Kilpatrick, 405 Colorado Bldg., Washington, D. C.

TRADE LITERATURE.

Penberthy Engineer and Fireman.

The Penberthy Engineer and Fireman, a monthly magazine published in the interest of steam users, has been issued for November. It contains a number of timely articles relating to the subjects of the slide valve, erecting an engine, location of feed-water inlet, sheet packing, etc. The magazine is published by the Penberthy Press, 372 Holden Ave., Detroit, Mich.

Cotton Chats for September.

Cotton Chats for September, a monthly publication issued by the Draper Company of Hopedale, Mass., is being distributed. It contains an illustration and description of the Draper Company's L model Northrop loom for broad sheetings, and refers to its Southern supply department in Atlanta, Ga., where it carries a stock of from 300 to 400 tons of finished loom repairs.

Indiana Automatic Gas Machines.

An automatic gas machine which is said to be practical, producing gas not only for private residences, but for stores, theaters, halls, churches, public buildings, villages and small cities, is the Indiana automatic gas machine. It is manufactured by the Indiana Automatic Gas & Machine Co., 906 North Illinois St., Indianapolis, Ind., and is made in various sizes. The company is circulating a pamphlet which illustrates and describes it.

Instructions in Metal Spinning.

A handbook on the subject of metal spinning, which is one of a series being published by the Popular Mechanics Co., Chicago, Ill., has recently been issued. The publication was prepared by Prof. F. D. Crawshaw of the University of Illinois, and contains 80 pages with 33 illustrations. It is a working manual of instructions adapted to the use of manual-training and industrial schools, as well as to those who desire to spin metal as an art, recreation or trade.

Brush and Pail.

Brush and Pail, a monthly magazine devoted to the interests of painters and decorators, has been issued for October. It presents a view in colors of an empire period library, showing a study in French, and of a colonial period dining-room, showing the William and Mary effect, together with an article on the "Advantage of Using Advertiser Materials," by Claude C. Hopkins, and other information. The magazine is published by the Alabastine Company, Grand Rapids, Mich.

The Harvester World.

The first number of the Harvester World, a magazine which will be devoted to the interests of the farm-machine industry, has recently been issued. Its scope is indicated somewhat by the initial number, and from time to time it is intended to publish articles relating to the development of agricultural methods, general news of the trade and other articles bearing on the farm-machine industry, etc. The Harvester World is published by the International Harvester Co. of America, Harvester Bldg., Michigan Avenue and Harrison St., Chicago, Ill.

The Wisconsin Engine Co.'s Bulletins

The practice of issuing bulletins from time to time is becoming more and more widespread among manufacturers and others, who prefer this method of introducing their products to the use of catalogues. In many cases, however, bulletins are carelessly designed and compiled and make little or no appeal to any artistic sense. Striking contrast to this class of literature is presented in Bulletin C-4, issued by the Wisconsin Engine Co., engineer and builder, Corliss, Wis., and is the first of a series to be issued from time to time. It has been the endeavor of the company to present something different from the ordinary bulletin, yet something up to the standard of catalogue work. This publication illustrates and describes the company's heavy duty Corliss engines of the belted type, and the cover is mechanically

arranged to accommodate future bulletins relating to the same types of engines, which bulletins will be punched to fit the staples inside the cover. The cover stock is heavy-weight "Cloister," for durability, and the smooth finish makes it easily handled between other catalogues on the same file. In the bulletin the company has endeavored to include information of value to engineers and architects, including data showing the method of estimating the size of compound engines.

Northampton Portland Cement.

Because of the growing use of concrete in building construction and the employment of other materials in which cement is an essential ingredient, the demand for this product is rapidly increasing, and to obtain the best results it is necessary to use that class of cement which is capable of so mixing as to produce the maximum strength and density. A product which has been employed in the construction of some of the most prominent buildings in this country, as well as on other classes of important construction, is the Northampton Portland cement. This product is manufactured by the Northampton Portland Cement Co., with main offices at 165 Broadway, New York, and having a plant of 8000 barrels daily capacity at Stockertown, Pa. A pamphlet which the company is distributing presents interesting views of structural work in which Northampton Portland cement has been used, with comprehensive descriptive data. It also contains an article by J. A. Setze of the Northampton Portland Cement Co. on the "Proper Economical Proportions for Concrete," whose object is to give practical methods for economical cement construction. In his article Mr. Setze considers the mixing of mortar and concretes and the proper methods of laying sidewalks.

Thomas J. Hayward.

Announcement has been made of the death of Thomas J. Hayward, president of the Bartlett-Hayward Company, iron founder and manufacturer of iron and steel products, Scott and McHenry streets, Baltimore, Md. Mr. Hayward was descended from English ancestors, and was born in Baltimore on June 5, 1847. He founded the firm of Hayward, Bartlett & Co. and did much to develop and bring into general use modern methods of ventilating and heating all classes of structures.

FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,
Baltimore, Md., November 3.

The features of the Baltimore stock market during the past week were the rise in Atlantic Coast Line certificates, accompanied by much trading, and the advance in Consolidation Coal stock. Generally the market was steady, with more trading in bonds.

In the trading United Railways incomes sold at 58½ to 58; do. funding 5s, 83½ to 84; do. do. scrip, 85½; United 4s, 86½ to 86; United Light & Power 4½s, 92½; Consolidated Gas, Electric Light & Power preferred, 81 to 82; Consolidated Gas 6s, 100½ to 100; Seaboard Company common, 17; Seaboard 4s, certificates, 79½ to 80; Seaboard three-year 5s, 98½ to 98½; do. 10-year 5s, 99½; do. adjustment 5s, when issued, 67½ to 69; Mt. Vernon-Woodberry Cotton Duck 5s, 77; G.-B.-S. Brewing common, 2½; do. incomes, 14½ to 13½; do. 1sts, 45 to 44½.

Bank stock sold as follows: Merchants', 107; Citizens', 39½; Howard, 13½; United States Fidelity & Guaranty sold at 140 to 141; Fidelity & Deposit, 155; Maryland Casualty, 120.

Other securities were traded in thus: Georgia Southern & Florida first preferred, 93; do. second preferred, 73; Northern Central Railway stock, 105½ to 106; Atlantic Coast Line consolidated 4s, 95½ to 95½; do. new 4s, certificates, 94½ to 103; Atlantic Coast Line Railroad

stock, 137 to 138; Atlantic Coast Line of South Carolina 4s, 98½ to 98; Atlantic Coast Line of Connecticut, 328 to 335; do. do. 5-20s, 93; do. do. 4s, certificates, 89½; Newport News & Old Point 5s, 95; Potomac Valley 5s, 105; Virginia Midland 2ds, 101½; Baltimore & Harrisburg 5s, 106; Maryland Electric 5s, 97½ to 97½; Baltimore City 3½s, 1928, 98½; do. do. 1930, 100%; do. do. 1980, 93½; Maryland, Delaware & Virginia preferred, 11 to 14; Florida Southern 4s, 93; Western Maryland 4s, 83½; Alabama Consolidated Coal & Iron 5s, 84½; Consolidation Coal, 104 to 110, last sale at 107½; Atlanta Consolidated Street Railway 5s, 105; Houston Oil common, 8½; Detroit United 4½s, 83; Arkansas, Oklahoma & Western, 7½; Carolina Central 4s, 93½; Southbound 5s, 105½; Virginia Midland 5th, 107½; Georgia & Alabama Consolidated 5s, 104½; Petersburg B, 118½; Consolidation Coal refunding 4½s, 95½; Fairmont & Clarksburg Traction 5s, 96; West Virginia Central 6s, 101; Georgia, Carolina & Northern 5s, 105.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended
November 3, 1909.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast.....	100	100	137
Atlantic Coast Pfd.....	100	115	115
Atlantic Coast of Conn.....	100	330	340
Georgia South. & Fla.....	100	25	39½
Georgia South. & Fla. 1st Pfd.....	100	92½	94½
Georgia South. & Fla. 2d Pfd.....	100	73	75
Norfolk Railway & Light.....	25	20	20
Seaboard Co. Com.....	100	17	17½
Seaboard Co. 2d Pfd.....	100	36	36
United Ry. & Elec. Co.....	50	12½	12½
Bank Stocks.			
Citizens' National Bank.....	40	39	39
Commercial and Farmers'.....	100	85	110
Drovers and Mechanics'.....	100	220	220
First National Bank.....	100	137	140
Maryland National Bank.....	20	21	21
Merchants' National Bank.....	100	166	166
National Bank of Baltimore.....	100	124½	124½
National Bank of Commerce.....	15	29	31
National Exchange Bank.....	100	155	160
National Howard Bank.....	10	13½	13½
National Marine Bank.....	30	40	40
National Mechanics' Bank.....	10	27	27
National Union Bank of Md.....	100	122	122
Second National Bank.....	100	195	195
Western National Bank.....	20	37½	37½
Trust, Fidelity and Casualty Stocks.			
American Bonding Co.....	25	76	77½
Continental Trust.....	100	215	225
Fidelity & Deposit.....	50	155	155
Merc. Trust & Deposit.....	50	145	150
Safe Deposit & Trust.....	100	505½	505½
Union Trust.....	50	50	72
U. S. Fidelity & Guaranty.....	100	140	142
Miscellaneous Stocks.			
Ala. Con. Coal & Iron.....	100	30	37
Ala. Con. Coal & Iron Pfd.....	100	80	80
Con. Cotton Duck Com.....	50	6	6
Con. Cotton Duck Pfd.....	50	21	21
Con. Gas, Elec. Lt. & P. Com.....	100	30	35½
Con. Gas, Elec. Lt. & P. Pfd.....	100	82	82½
Consolidation Coal.....	100	107	108
G.-B.-S. Brewing Co.....	2	100	100
George's Creek Coal.....	100	93	97

Ala. Con. Coal & Iron.....	100	30	37
Ala. Con. Coal & Iron Pfd.....	100	80	80
Con. Cotton Duck Com.....	50	6	6
Con. Cotton Duck Pfd.....	50	21	21
Con. Gas, Elec. Lt. & P. Com.....	100	30	35½
Con. Gas, Elec. Lt. & P. Pfd.....	100	82	82½
Consolidation Coal.....	100	107	108
G.-B.-S. Brewing Co.....	2	100	100
George's Creek Coal.....	100	93	97

Atlantic Coast Line 1st 4s, 1952.....	95½	95½	95½
Atlantic Coast Line New 4s, Cfs.....	103	103	103
Atlantic C. L. Com. 4s, Cfs.....	93	93	93
Atlantic C. L. (Conn.) 5s, Cfs.....	104	104	104
Atlantic C. L. (Conn.) 4s, Cfs.....	89½	89½	89½
Atlantic C. L. (S. C.) 4s, 1948.....	97	98	98
Balto. & Harrisburg 5s, 1938.....	105½	105½	105½
Carolina Central 4s, 1948.....	92	92½	92½
Charleston & West. Car. 5s, 1948.....	100	100	100
Georgia & Alabama 5s, 1945.....	104	104½	104½
Georgia, Car. & North. 1st 5s, 1929.....	104½	104½	104½
Georgia South. & Fla. 1st 5s, 1945.....	108½	108½	108½
Maryland & Penna. 4s, 1951.....	92	92	92
Piedmont & Cum 1st 5s, 1911.....	98	99½	99½
Potomac Valley 1st 5s, 1941.....	105	108	108
Richmond & Dan. Gold 6s, 1915.....	107½	108	108
Richmond & Danville 5s.....	106	107½	107½
Seaboard Air Line 5s, 10-yr., 1911.....	98½	99½	99½
Seaboard Air Line 5s, 3-yr., 1911.....	98½	99½	99½
South Bound 5s, 1941.....	98½	99½	99½
Virginia Midland 2d 6s, 1911.....	109	109½	109½
Virginia Midland 3d 6s, 1916.....	107	108	108
Virginia Midland 5th 5s, 1926.....	69	62	62
Wash., Balto. & Annapolis 1st 5s.....	96½	96½	96½
Washington & Vandemere 4½s.....	83½	85	85
Western Maryland 4s, 1952.....	101	107	107
Western N. C. Con. 6s, 1914.....	101	107	107
W. Va. Cent. 6s, 1911.....	109½	109½	109½
Wil. Col. & Aug. 6s, 1910.....	111	112½	112½
Wilmington & Weld. Gold 5s, 1935.....	104	105	105

Atlanta Con. Street Railway 5s.....	104	105	105
Annapolis Ry. & Elec. 5s, 1940.....	99	99	99
Balto. City Pass. 5s, 1911.....	100½	100½	100½
Balto., Sp. Pt. & C. 4½s.....	92	93	93
City & Suburban 5s (Wash.), 1948.....	103	104½	104½
Fairmont & Clarksburg Trac. 5s.....	96	96½	96½
Knoxville Trac. 1st 5s, 1928.....	105½	105½	105½
Lake Roland Elevated 5s, 1942.....	112½	112½	112½
Macon Ry. & Lt. 1st Con. 5s, 1953.....	94½	95	95
Maryland Electric Railways 5s.....	97	98	98
Memphis Street Railway 5s.....	92½	95	95
Newport News & Old Pt. 5s, 1938.....	82½	85	85
Norfolk & Ports. Trac. 5s.....	98	98	98
Norfolk Railway & Light 5s.....	85½	86	86
United Railways 1st 4s, 1949.....	58	58½	58½
United Railways Inc. 4d, 1949.....	58	58½	58½
United Railways Funding 6s.....	83½	83½	83½

Miscellaneous Bonds.			
Ala. Con. Coal & Iron 5s.....	85	85	85
Consolidated Gas 6s, 1910.....	100½	100½	100½
Consolidated Gas 4½s.....	94	95	95
Con. Gas, Elec. Lt. & P. 4½s.....	85	85	85
G.-B.-S. Brewing 1st 4s.....	44½	44½	44½
G.-B.-S. Brewing Income 4s.....	13½	14	14
Maryland Steel Co. 5s.....	100	100	100
Maryland Telephone 5s.....	100	100	100
Mt. Vernon-Woodby's Cot. Duck 5s.....	76½	77½	77½
United Elec. Lt. & P. 4½s.....	92½	97	97

[Other Financial News, See Page 88.]

EXTRACTS FROM
SEVENTH ANNUAL REPORT
OF

The Rock Island Company

Fiscal Year Ended June 30, 1909.

To the Stockholders of The Rock Island Company:

The Board of Directors herewith submit their report of the affairs of the Rock Island Company for the fiscal year ended June 30, 1909.

The "Income Account," "Profit and Loss Account" and "General Balance Sheet" will be found in this report.

Changes in the company's condition during the year are as follows:

CAPITAL STOCK.

Preferred:	June 30, 1909.	June 30, 1908.	Increase.	Decrease.
In hands of public.....	\$49,270,690 00	\$49,139,300 00	\$131,390 00	
In treasury.....	4,729,310 00	4,890,700 00		\$161,390 00
Total.....	\$54,000,000 00	\$54,000,000 00		
Common:				
In hands of public.....	\$89,921,402 50	\$89,733,702 50	\$187,700 00	
In treasury.....	6,078,597 50	6,266,297 50		\$187,700 00
Total.....	\$96,000,000 00	\$96,000,000 00		

The increase in stock outstanding represents the acquisition by the Chicago, Rock Island & Pacific Railroad Co. of 1877 shares of stock of the Chicago, Rock Island and Pacific Railway Co.

Changes in the condition of Chicago, Rock Island and Pacific Railroad Co. are as follows:

FUNDED DEBT.

	June 30, 1909.	June 30, 1908.	Increase.
Four Per Cent. Gold Bonds (due 2002).....	\$70,386,700 00	\$70,199,000 00	\$187,700 00
Five Per Cent. Gold Bonds (due 1913).....	17,364,180 00	17,364,180 00	
Total.....	\$87,750,880 00	\$87,563,180 00	\$187,700 00

The \$187,700 of four per cent. Gold Bonds were issued against the acquisition of 1877 shares of stock of the Chicago, Rock Island & Pacific Railway Co.

As the Rock Island Company is the owner of the entire capital stock, except directors' shares, of the Chicago, Rock Island & Pacific Railroad Co., the income of both companies is included in the following statement:

COMBINED INCOME ACCOUNT—THE ROCK ISLAND COMPANY AND CHICAGO, ROCK ISLAND & PACIFIC RAILROAD CO.

Dividends on the Chicago, Rock Island & Pacific Railway Co. stock owned:
One and three-quarters per cent. on 702,125 shares, received October 1, 1908.....\$1,228,718 75
One per cent. on 702,638 shares, received January 2, 1909.....702,638 00
One and one-half per cent. on 703,436 shares, received April 1, 1909.....1,055,154 00
One per cent. on 703,861 shares, received June 30, 1909.....703,861 00

Other income.....\$3,690,371 75
Total income.....\$3,712,103 03

Less expenses and taxes.....\$19,928 25

Less interest on Chicago, Rock Island and Pacific Railroad Co. bonds, viz.:

Four per cent. bonds.....\$2,811,765 36

Five per cent. bonds.....868,200 00

Balance for current fiscal year.....\$12,209 41

Surplus June 30, 1908.....457,357 72

Balance.....\$459,567 13

Deduct sundry items not applicable to current year.....11,708 56

Surplus June 30, 1909.....\$457,858 57

Separate detailed statements of the receipts and disbursements of each company are shown on pages 9 and 10 of pamphlet report.

BALANCE SHEET, JUNE 30, 1909.

Assets:	
Stocks owned.....	\$150,012,031 42
Cash.....	12,938 68
Due from companies and individuals.....	607,419 91
Liabilities:	
Capital stock—common.....	\$96,000,000 00
Capital stock—preferred.....	54,000,000 00
Due to companies and individuals.....	\$150,000,000 00
Surplus.....	548,643 50
	\$3,746 51
	\$150,632,390 01

STATEMENT OF COMBINED INCOME ACCOUNT OF OPERATED LINES, YEAR ENDED JUNE 30, 1909, COMPARED WITH PRECEDING FISCAL YEAR.

	Rock Island Lines, 1909.	Rock Island Lines, 1908.	St. Louis and San Francisco Railroad Lines, 1909.	St. Louis and San Francisco Railroad Lines, 1908.	Chicago and Eastern Illinois Railroad, 1909.	Chicago and Eastern Illinois Railroad, 1908.	Evansville and Terre Haute Railroad (Inc. Evansville and Indianapolis R. R.), 1909.	Evansville and Terre Haute Railroad (Inc. Evansville and Indianapolis R. R.), 1908.	Total of all roads, 1909.	Total of all roads, 1908.
Average mileage operated.....	8,026.38	7,969.53	5,251.06	5,064.16	965.68	957.10	310.41	310.41	14,553.53	14,301.20
Revenue from transportation:										
Freight.....	\$39,158,053 16	\$37,899,356 26	\$25,618,875 74	\$23,976,296 87	\$8,055,582 87	\$8,523,386 97	\$1,298,013 90	\$1,429,498 14	\$74,080,525 76	\$71,838,538 34
Passenger.....	17,883,378 99	16,693,110 45	9,655,885 73	8,927,036 90	1,666,981 00	1,680,303 14	581,298 87	570,403 01	29,787,544 59	27,870,853 50
Mail.....	1,429,829 62	1,398,173 95	1,002,335 00	979,927 21	123,001 47	120,261 44	60,601 94	59,175 20	2,615,769 03	2,557,537 90
Express.....	1,626,531 51	1,424,183 36	1,133,291 29	1,129,153 27	277,006 03	248,938 51	47,429 73	37,007 04	3,085,258 58	2,839,282 18
Miscellaneous.....	720,290 57	701,890 51	543,585 43	557,149 04	118,127 04	117,302 74	87,687 28	83,265 11	1,469,680 32	1,469,517 40
Total transportation revenue.....	\$60,818,473 87	\$58,116,624 53	\$37,953,973 19	\$35,569,563 29	\$10,191,298 41	\$10,690,192 80	\$2,075,031 81	\$2,189,348 60	\$111,038,777 28	\$106,565,729 32
Revenue from operations other than transportation.....	366,413 08	367,572 25	241,764 47	236,568 82	78,320 58	52,538 60	18,965 34	14,720 82	705,463 47	671,400 49
Total operating revenue.....	\$61,184,886 95	\$58,484,196 88	\$38,195,737 66	\$35,806,132 11	\$10,269,618 99	\$10,742,731 40	\$2,093,997 15	\$2,204,069 42	\$111,744,240 75	\$107,237,129 81
Operating expenses:										
Maintenance of way and structures.....	\$9,051,830 36	\$8,078,025 53	\$5,094,615 70	\$4,671,416 27	\$994,709 67	\$1,205,711 00	\$268,209 80	\$287,063 69	\$15,409,305 53	\$14,242,216 49
Maintenance of equipment.....	7,512,888 55	7,358,589 65	4,638,515 91	4,559,107 25	1,663,759 25	1,099,703 83	369,082 25	303,229 79	\$14,084,245 94	\$13,870,630 52
Traffic expenses.....	1,441,214 58	1,486,473 58	894,874 17	833,674 98	210,011 47	197,295 38	46,366 17	39,462 72	2,592,466 39	2,556,910 66
Transportation expenses.....	22,448,062 29	20,600,341 75	13,294,083 88	12,663,832 92	3,635,685 77	3,926,534 63	663,532 29	679,570 17	\$40,441,354 33	\$41,870,079 47
General expenses.....	1,659,509 53	1,612,749 46	1,241,924 74	1,279,459 23	430,367 37	415,547 59	74,773 95	80,396 93	3,406,575 59	3,388,144 31
Total operating expenses.....	\$42,513,495 41	\$42,136,179 97	\$25,164,014 40	\$25,007,285 75	\$6,934,533 51	\$7,354,792 43	\$1,321,964 46	\$1,389,723 30	\$75,934,007 78	\$75,887,981 45
Net operating revenue.....	\$18,671,391 54	\$16,348,016 91	\$13,031,723 26	\$10,798,846 36	\$3,335,085 48	\$3,387,938 97	\$772,032 69	\$814,346 12	\$35,810,232 97	\$31,349,148 36
Taxes.....	2,270,864 55	1,789,894 79	1,544,604 00	948,414 62	274,114 66	358,586 94	110,142 00	104,277 77	\$4,990,725 21	\$3,901,174 12
Operating income.....	\$16,400,526 99	\$14,558,122 12	\$11,487,119 26	\$9,850,431 74	\$3,060,970 82	\$3,029,352 03	\$661,890 69	\$710,068 35	\$31,610,507 76	\$28,147,974 24
Other income.....	211,470 89	128,633 45	816,056 81	270,645 51	585,903 47	989,499 46	115,883 80	102,222 25	1,729,114 97	1,609,870 67
Total income.....	\$16,611,997 88	\$14,686,755 57	\$12,303,176 07	\$10,121,077 25	\$3,646,874 29	\$4,018,851 49	\$777,874 49	\$812,290 60	\$33,339,622 73	\$29,817,844 91
Interest and rentals.....	\$10,429,189 98	\$9,968,453 62	\$10,397,166 73	\$9,662,011 11	\$2,951,403 35	\$2,882,623 73	\$602,758 35	\$592,048 05	\$24,380,518 41	\$23,095,136 51
Betterments on leased lines.....	16,577 16	10,199 54							16,577 16	10,199 54
Total charges.....	\$10,445,767 14	\$9,978,653 16	\$10,397,166 73	\$9,662,011 11	\$2,951,403 35	\$2,882,623 73	\$602,758 35	\$592,048 05	\$24,397,095 57	\$23,105,336 05
Balance of income.....	\$6,166,230 74	\$4,718,102 41	\$1,906,009 34	\$458,066 14	\$695,470 94	\$1,136,227 76	\$175,116 14	\$220,242 55	\$8,942,527 16	\$6,712,508 86
Dividends.....	3,990,018 75	3,929,785 00	777,166 12	199,743 12	674,198 00	1,251,822 00			\$6,281,382 87	\$6,381,149 12
Balance of surplus.....	\$2,236,211 99	\$788,317 41	\$1,128,843 22	\$258,323 02	\$20,272 94	\$115,394 24	\$175,116 14	\$220,242 55	\$3,561,144 29	\$1,331,359 74

NOTE.—To preserve comparisons the operating expenses for year 1908 are restated to conform with the amended classification of the Interstate Commerce Commission, effective July 1, 1908.

PROFIT AND LOSS.

Surplus June 30, 1908.....	\$111,963 97
Expenses and taxes.....	\$17,113 35
Sundry charges not applicable to current year.....	11,633 31
	\$28,746 66
Less other income.....	629 20
Surplus June 30, 1909.....	\$83,746 51

BALANCE SHEET, JUNE 30, 1909.

Assets:	
Stocks owned.....	\$232,793,841 21
Other investments.....	330,631 44
Cash and cash items.....	831,269 41
Liabilities:	
Capital stock.....	\$145,000,000 00
Funded debt—	
Gold bonds, four per cent. (due 2002).....	\$70,386,700 00
Gold bonds, five per cent. (due 1913).....	17,364,180 00
Unpaid coupons.....	\$62,110 00
Interest accrued (not due).....	758,640 00
Surplus.....	\$20,750 00
	\$74,112 06
	\$233,945,742 06

PROFIT AND LOSS.

Surplus June 30, 1908.....	\$345,393 77
Dividend on the Chicago, Rock Island & Pacific Railway Co. stock owned—	
One and three-quarters per cent. on 702,125 shares, received October 1, 1908.....	\$1,228,718 75
One per cent. on 702,638 shares, received January 2, 1909.....	702,638 00
One and one-half per cent. on 703,436 shares, received April 1, 1909.....	1,055,154 00
One per cent. on 703,861 shares, received June 30, 1909.....	703,861 00
Other income.....	\$3,690,371 75
Total income.....	\$3,712,103 03
Expenses.....	\$2,811 91
Interest on four per cent. bonds.....	2,811,765 36
Interest on five per cent. bonds.....	868,200 00
	\$3,680,000 36
Balance for current fiscal year.....	\$28,793 56
Balance.....	\$374,187 31
Deduct sundry items not applicable to current year.....	75 25
Surplus June 30, 1909.....	\$374,112 06

Appended hereto are statements and exhibits illustrating the operations and affairs of the various properties in which your Company is interested. For fuller details as to these properties, stockholders are commended to an examination of the annual reports of the Chicago, Rock Island & Pacific Railway Co., St. Louis & San Francisco Railroad Co., Chicago & Eastern Illinois Railroad Co. and Evansville & Terre Haute Railroad Co.

By order of the Board of Directors,

R. A. JACKSON, President.

October 15, 1909.

COMBINED STATEMENT OF PROFIT AND LOSS OF OPERATED LINES AS OF JUNE 30, 1909.

Credit:	
Balance as of June 30, 1908.....	\$22,819,102 72
Surplus for the year ended June 30, 1909, as per combined income account (page 15, pamphlet report).....	\$3,561,144 29
Special improvements and equipment fund.....	2,043,911 78
Sundry credits not affecting current year's income.....	92,613 12
Total credit.....	\$28,516,771 91
Debit:	
Discount on securities sold, stocks and bonds exchanged, and expenditures in connection with listing and issuing new bonds.....	\$2,090,482 80
Depreciation on tracks, structures, equipment and other property removed, sold or destroyed.....	2,096,662 53
Dividends applicable to prior years, paid out of surplus, as shown in report of the operating company.....	220,523 50
Reduction in book value of property accounts as explained in report of the operating company.....	150,000 00
Amount paid for damages by fire, in a previous fiscal year, to property not belonging to nor in the custody of the operating company.....	206,977 27
Sundry debits not affecting current year's income.....	27,096 06
Total debit.....	\$4,791,742 16
Balance June 30, 1909.....	\$23,725,029 75

EXTRACTS FROM THE
TWENTY-NINTH ANNUAL REPORT
 OF

The Chicago, Rock Island & Pacific Railway Co.

Fiscal Year Ended June 30, 1909.

To the Stockholders:

The Board of Directors herewith submit their report of the operations and affairs of the Rock Island Lines for the fiscal year ended June 30, 1909.

The results of the operations for the year were as follows:

Total operating revenue (increase \$2,700,690.07, or 4.6 per cent.).....\$61,184,886 95
 Operating expenses (increase \$377,315.54, or .9 per cent.).....42,513,495 41

Net operating revenue (increase \$2,323,374.63, or 14.2 per cent.).....\$18,671,391 54
 Taxes (increase \$480,969.76, or 26.9 per cent.).....2,270,864 55

Operating income.....\$16,400,526 99
 Miscellaneous income.....211,470 89

Total income.....\$16,611,997 88
 Interest and rentals.....10,445,767 14

Balance of income, after providing for all charges, being 8.2 per cent. on capital stock (\$75,000,000.00).....\$6,166,230 74
 Dividends paid (5 1/4 per cent. on capital stock).....3,930,018 75

Balance surplus for the year (increase \$1,447,894.58, or 183.7 per cent.).....\$2,236,211 99

To afford proper comparison the percentages of increase are computed on basis of last year's figures revised according to modifications in classification of operating expenses prescribed by the Interstate Commerce Commission, effective July 1, 1908.
 For comparative income account in detail see table on page 13 of pamphlet report.

CAPITAL STOCK.

The capital stock of the company outstanding at the close of the previous fiscal year was \$74,859,600.00, and is unchanged at June 30, 1909.

FUNDED DEBT.

During the year the funded debt increased \$3,775,000.00, equipment notes decreased \$1,051,541.00, and the two-year notes for \$6,000,000.00 were paid April 1, 1909, making a net decrease in funded and other fixed interest-bearing debt of \$3,276,541.00.

FRANCHISES AND PROPERTY.

The cost of franchises and property increased \$1,039,815.01, details being shown on page 18, pamphlet report. There were also expended \$2,602,558.18 for additions and improvements. For particulars, see page 19, pamphlet report.

NEW LINES CONSTRUCTED.

Of the line between Amarillo, Tex., and Tucumcari, N. M., which has been shown as under construction by the Chicago, Rock Island & Gulf, and Chicago, Rock Island & El Paso Railway companies, 12.11 miles west from Wildorado to Vega, Texas, were placed in operation March 17, 1909; 1.97 miles to Ontario, Texas, were placed in operation May 1, and 5.82 miles west of Ontario on May 15, 1909. The line is laid with 60-pound steel rail. Standard station buildings have been completed at Bush and Wildorado, Texas.

NEW EQUIPMENT.

Orders have been placed during the year for 100 passenger-train cars of steel construction, 60 caboose cars, 2 service cars, 35 locomotives and 1 passenger motor car. There were received and placed in service 33 locomotives, 1 passenger-train car, 2 service cars and 2 motor cars (1 ordered last year), and 1 service car has been built. In addition to the foregoing there have been ordered since July 1, 1909, for delivery in 1909 and 1910, 50 locomotives, 1 passenger motor car and 3550 freight-train cars. See details on pages 36, 38 and 39, pamphlet report.

GENERAL.

Announcement was made last year of the completion of the line of the Rock Island, Arkansas & Louisiana Railroad from Haskell, Ark., near Little Rock, to Eunice, La. The Colorado Southern, New Orleans & Pacific Railroad, with which your line connects at Eunice, was completed in August, 1909, and the through line into New Orleans is now in operation.

During the fiscal year there were established in the territory through which your company's rails are laid four hundred and two new industries, as shown in the records of the industrial department. These are estimated to have cost over eight millions of dollars, to employ over eleven thousand persons, and to create a movement of over fifty-seven thousand carloads annually.

Three new side tracks were built to coal mines and eighty-two to private industries; extensions were added to three mine tracks and to twenty-one tracks to other industries.

The work of installing automatic block signals between Davenport and Muscatine, Iowa; Davenport and Iowa City, Iowa, and between Topeka and Herington, Kans., has been completed during the year. Signals for 232 miles of main line in the State of Iowa are being installed. At June 30, 1909, 346 miles of main line were protected by automatic block signals, at a cost of \$456,359.08.

At the close of the year the telephone system of train dispatching had been installed on 419.5 miles of your line at a cost of \$32,214.14, and authority had been given for 181 additional miles, for which material has been purchased and work is in progress.

For the completion of the additional and improved terminals mentioned in the reports of the last two years, and for new facilities of a similar nature, your company has expended during the current fiscal year \$644,397.32.

Of the large increase in taxes, amounting to \$480,969.76, or 26.87 per cent., \$16,490.49 is in the State of Arkansas, \$13,377.23 in Louisiana, \$14,732.94 in New Mexico, and \$435,548.89 in Oklahoma. The remainder, comprising smaller increases and decreases, is distributed over the other States in which your road operates. In Arkansas and Louisiana the valuations during the preceding year were low because of newly-constructed road; in New Mexico no taxes are assessed against railroads until five years after they have been placed in operation, therefore the first taxes on your line in that State were for the calendar year 1908, causing the report for last year to show only one-half the annual taxes, while this report includes taxes for an entire year. In Oklahoma the taxes assessed are for a period of considerably more than a year, are the first assessed by the new State, and it is thought will later be substantially reduced.

Your company advanced during the year towards the construction, equipment and operating deficit of the Trinity & Brazos Valley Railway \$63,885.89, making the total advances to June 30, 1909, \$1,336,840.36, of which \$37,217.49 was reimbursed out of the proceeds of bonds of The Colorado & Southern Railway Co., leaving \$1,299,622.87 outstanding advances as of June 30, 1909.

Advances during the year for Galveston, Texas, terminals were \$89,563.26, making the total advances to June 30, 1909, \$471,673.75. First mortgage 6 per cent. bonds of the Galveston Terminal Railway Co. were received in settlement of \$456,148.70, leaving \$15,525.00 outstanding advances as of June 30, 1909.

Advances during the year for Houston, Texas, terminals were \$66,360.14, making the total advances to June 30, 1909, \$308,102.12. First mortgage bonds of the Houston Belt & Terminal Railway Co. were received in settlement of \$277,609.55, leaving \$30,492.57 outstanding advances as of June 30, 1909.

In consequence of the supervision of the company's accounts now exercised by the Interstate Commerce Commission, and the fact that these accounts are kept in strict accordance with regulations prescribed by the Commission, it has been deemed by your directors unnecessary to incur the expense of having them certified by an independent auditor. Regular monthly income accounts, verified, under oath, by the president and general auditor of the company, have been duly filed with the Commission, and the annual report with sworn verification has also been filed as required by law.

By order of the Board of Directors,
 October 15, 1909.

B. L. WINCHELL, President.

ROCK ISLAND LINES—INCOME ACCOUNT, YEAR ENDED JUNE 30, 1909, COMPARED WITH PREVIOUS YEAR.

	1908-09.	1907-08.	Increase.	P. ct.	Decrease.	P. ct.
Average mileage operated.....	8,026.38	7,969.53	56.85	.71		
Revenue from transportation:						
Freight.....	\$39,158,063 16	\$37,899,356 36	\$1,258,696 80	3.32		
Passenger.....	17,833,378 99	16,693,110 45	1,140,268 54	7.13		
Mail.....	1,428,829 62	1,398,173 56	30,656 07	2.26		
Express.....	1,628,931 53	1,424,183 36	204,748 17	14.24		
Miscellaneous.....	720,280 57	701,800 51	18,480 06	2.63		
Total transportation revenue.....	\$60,318,473 87	\$58,116,624 63	\$2,201,849 24	4.65		
Revenue from operations other than transportation.....	366,412 08	367,572 25			\$1,159 17	.32
Total operating revenue.....	\$61,184,886 95	\$58,484,196 88	\$2,700,690 07	4.62		

Operating Expenses:						
Maintenance of way and structures.....	\$9,051,830 36	\$8,078,025 53	\$973,804 83	12.05		
Maintenance of equipment.....	7,612,888 55	7,358,589 65	254,298 90	3.46		
Traffic expenses.....	1,441,214 58	1,486,473 58			\$45,259 00	3.04
Transportation expenses.....	22,848,052 39	23,690,341 75			752,289 36	3.19
General expenses.....	1,659,509 53	1,612,749 46	46,760 07	2.90		
Total operating expenses.....	\$42,513,495 41	\$42,136,179 97	\$377,315 44	.90		
Net operating revenue.....	\$18,671,391 54	\$16,348,016 91	\$2,323,374 63	14.21		
Taxes.....	2,270,864 55	1,789,894 79	480,969 76	26.87		
Operating income.....	\$16,400,526 99	\$14,558,122 12	\$1,842,404 87	12.66		
Outside operations (debit balance).....	\$176,201 11	\$92,727 28			\$83,473 83	57.67
Write of equipment (debit balance).....	812,116 05	912,279 35	\$100,163 30	10.98		
Other income.....	1,163,785 05	1,133,640 08	30,144 97	3.19		
Total.....	\$211,470 89	\$128,633 45	\$82,837 44	64.40		
Total income.....	\$16,611,997 88	\$14,686,755 57	\$1,925,242 31	13.11		
Interest.....	\$8,861,223 05	\$8,413,221 92	\$448,001 13	5.32		
Rentals.....	1,567,966 93	1,545,231 70	22,735 23	1.47		
Betterments on leased lines.....	16,577 16	10,199 54	6,377 62	62.53		
Total charges.....	\$10,445,767 14	\$9,968,653 16	\$477,113 98	4.79		
Balance of income (available for dividends).....	\$6,166,230 74	\$4,718,102 41	\$1,448,128 33	30.69		
Dividends.....	3,930,018 75	3,929,785 00	233 75	.01		
Balance surplus (carried to credit of profit and loss).....	\$2,236,211 99	\$788,317 41	\$1,447,894 58	183.67		

DIVIDENDS DECLARED DURING YEAR ENDED JUNE 30, 1909.

Dividend No. 113, 1 1/2 per cent., paid October, 1908.....	\$1,310,006 25
Dividend No. 114, 1 per cent., paid January, 1909.....	748,575 00
Dividend No. 115, 1 1/2 per cent., paid April, 1909.....	1,122,862 50
Dividend No. 116, 1 per cent., paid July, 1909.....	748,575 00
Total, 5 1/4 per cent.....	\$3,930,018 75

PROFIT AND LOSS.

Credit balance, June 30, 1908.....	\$16,159,122 46
Surplus for year ended June 30, 1909.....	\$2,236,211 99
Special improvement and equipment fund.....	2,043,911 78
Sundry adjustments not affecting current year's income.....	87,084 61
	\$4,367,208 38

Less:	
Discount, commissions and expenses on stocks and bonds issued and sold, and expenses on option canceled.....	\$1,567,436 93
Depreciation on:	
Trucks removed.....	\$49,054 37
Structures sold, removed or destroyed.....	36,623 49
Equipment sold or destroyed.....	887,602 65
	973,280 51
Amount paid for damage by fire to property at Chickasha, Okla., April 11, 1907, not belonging to nor in the custody of your company.....	206,977 27
Betterments on leased lines prior to current fiscal year.....	11,375 21
	2,759,069 92
Betterment on leased lines prior to current fiscal year.....	1,608,138 46
Credit balance, June 30, 1909.....	\$17,767,260 51

CONDENSED GENERAL BALANCE SHEET, JUNE 30, 1909, AND COMPARISON WITH PREVIOUS YEAR.

	Assets.	1909.	1908.	Increase.	Decrease.
Capital Assets:					
Franchises and property.....	\$250,735,442 89	\$249,685,627 88	\$1,039,815 01		
Additions and improvements, current year.....	2,602,558 18	3,902,698 07		\$1,300,139 89	
Advances for construction and equipment.....	5,637,214 10	4,093,461 58	1,543,752 52		
Real estate.....	641,956 52	641,391 02	5 50		
Investment account—stocks representing ownership of Rock Island Lines in sundry properties.....	1,795,575 38	1,950,422 39		154,847 01	
Bonds of Toledo, St. Louis & Western Railroad Co.....	9,120,551 23	9,120,551 23			
Rock Island Improvement Co., equipment purchase under indenture of February 1, 1907.....	7,892,369 90	7,892,369 90			
American Locomotive Co., equipment purchase under indenture of October 15, 1907.....	774,221 61	782,055 00		7,833 39	
Total.....	\$278,189,929 81	\$278,069,177 07	\$1,120,752 74		
Current Assets:					
Cash.....	\$3,211,108 09	\$2,485,735 98	\$725,372 11		
Station agents and conductors.....	1,792,969 82	1,805,914 15		\$12,944 33	
Companies and individuals.....	2,851,944 17	3,094,647 17		242,703 00	
Express companies.....	103,118 26	348,052 38		244,934 12	
United States Postoffice Department.....	120,260 22	356,662 62		236,402 40	
Advances for construction, equipment, etc., fundable.....	500,632 31	711,060 89		210,428 58	
Loans and bills receivable.....	3,693,755 55	3,283,019 99	410,735 56		
First and refunding mortgage gold bonds—pledged against notes payable.....		4,606,500 00		4,606,500 00	
Bonds, etc., in treasury—unpledged.....	9,609,351 21	14,918,133 71		5,308,882 50	
Stocks in treasury—unpledged.....	925,542 11	921,131 23	4,410 88		
Accrued income from investments.....	233,323 16	194,076 27	39,246 89		
Unpaid insurance.....	147,915 23	166,891 52		18,976 29	
Material and supplies.....	5,724,800 61	5,256,578 68	468,221 93		
Total.....	\$28,914,641 74	\$28,208,404 59	\$706,237 15		
Grand total.....	\$308,104,571 55	\$306,277,581 66	\$1,826,989 89		
Liabilities.					
Capital stock.....	\$75,000,000 00	\$75,000,000 00			
Funded debt.....	195,625,000 00	191,850,000 00	\$3,775,000 00		
Equipment notes.....	5,900,000 00	6,951,541 00		\$1,051,541 00	
Collateral trust gold notes, due April 1, 1909 (extended one year from April 1, 1908).....		6,000,000 00		6,000,000 00	
Total.....	\$276,525,000 00	\$278,801,541 00		\$2,276,541 00	
Current Liabilities:					
Unpaid vouchers and drafts.....	\$2,654,393 79	\$4,489,081 52		\$1,834,687 73	
Unpaid wages.....	2,131,475 38	1,983,342 09	\$148,133 29		
Traffic balances.....	303,274 07	2,784 19	306,457 47		
Interest, rentals and dividends, due July 1.....	2,618,679 60	2,372,304 60	246,375 00		
Taxes accrued (not due).....	1,024,369 94	1,124,040 37		99,670 43	
Interest and rentals accrued (not due).....	1,567,647 21	1,485,547 67	82,099 54		
Interest coupons due and not presented.....	58,160 00	284,527 50		226,367 50	
Dividends due and not called for.....	5,768 07	5,886 32	781 25		
Bonds matured, not presented.....	3,000 00	7,900 00		4,900 00	
Notes payable.....	1,580,000 00	3,520,000 00		1,940,000 00	
Total.....	\$11,958,396 56	\$15,271,146 07		\$3,312,749 51	
Deferred Liabilities:					
Open carrying accounts in process of adjustment.....	\$355,418 94	\$69,829 87	\$425,248 81		
Reserve for replacement of leased line equipment.....	222,732 25	222,732 25			
Total.....	\$578,151 19	\$192,562 12	\$425,248 81		
Total liabilities.....	\$289,061,547 75	\$295,225,589 45		\$6,164,041 70	

Provisional Accounts:			
Reserve for replacement of equipment...	\$779,537 51	\$2,396,011 38	\$1,586,483 87
Insurance fund.....	440,532 37	436,285 63	\$4,246 74
Hospital fund.....	55,703 41	47,401 83	8,301 78
Special improvement and equipment fund.....		2,043,171 52	2,043,171 52
Total.....	\$1,275,773 29	\$4,882,870 16	\$3,617,106 87
Grand total liabilities (including provisional accounts).....	\$300,237,311 04	\$300,118,459 61	\$9,781,148 57
Profit and loss.....	17,767,290 51	16,159,122 05	\$1,608,138 46
Grand total.....	\$308,104,571 55	\$316,277,581 66	\$8,173,010 11

Note.—In stating the assets and liabilities of the companies forming the Rock Island Lines, the holdings of the Chicago, Rock Island & Pacific Railway Co. in the bonds and capital stock of the auxiliary lines, together with loans between the various companies, have been eliminated from the liabilities, and a like reduction made in the assets pertaining thereto; the figures shown, therefore, represent the book value of the assets and the liabilities without duplication.

Figures in italics denote debits.

FINANCIAL CHANGES DURING YEAR ENDED JUNE 30, 1909.

Resources:			
Cash on hand June 30, 1908.....			\$2,485,735 98
Funded debt increased (see page 20 of pamphlet report).....			\$3,775,000 00
Franchises and property (decrease):			
Additions and improvements for year ended June 30, 1908, transferred to franchises and property.....		\$3,902,698 07	
Less increase in other franchises and property.....	1,029,815 01		
Investment account—stocks representing ownership of Rock Island Lines in sundry properties (decrease).....		154,547 01	
American Locomotive Co., equipment purchase under indenture of August 15, 1907 (decrease).....		7,833 39	
Net credit to profit and loss account.....		1,608,138 46	
Changes in current accounts as follows:			
Decrease in Assets:			
Station agents and conductors.....	\$72,957 32		
Companies and individuals.....	242,703 00		
Express companies.....	244,934 12		
United States Postoffice Department.....	236,402 40		
Advances for construction, equipment, etc., fundable.....	210,428 58		
First and refunding mortgage gold bonds—pledged against notes payable.....	4,606,500 00		
Bonds, etc., in treasury—unpledged.....	5,308,882 50		
Prepaid insurance.....	18,976 29		
Increase in Liabilities:			
Unpaid wages.....	\$148,133 29		
Traffic balances.....	305,457 47		
Interest, rentals and dividends due July 1.....	245,775 00		
Interest and rentals accrued (not due).....	82,069 54		
Dividends due and not called for.....	781 75		
Open carrying accounts in process of adjustment.....	425,218 81		
Increase in Provisional Accounts:			
Insurance fund.....	\$4,246 74		
Hospital fund.....	8,301 78		
Less—Increase in Assets:			
Loans and bills receivable.....	\$410,705 56		
Stocks in treasury—unpledged.....	4,410 88		
Accrued income from investments.....	39,246 89		
Material and supplies.....	468,221 93		
Total.....	\$922,645 26		
Decrease in Liabilities:			
Unpaid vouchers and drafts.....	\$1,834,087 72		
Taxes accrued (not due).....	99,641 23		
Interest coupons due and not presented.....	226,367 50		
Bonds matured, not presented.....	4,900 00		
Notes payable.....	1,330,000 00		
Total.....	\$4,094,996 56		
Decrease in Provisional Accounts:			
Reserve for replacement of equipment.....	\$1,586,483 87		
Special improvement and equipment fund.....	2,043,171 52		
Total.....	\$3,629,655 39		
Balance, cash on hand June 30, 1909.....			\$3,211,108 09

Applied as follows:			
Additions and improvements, current year (total).....		\$2,602,558 18	
Advances for construction and equipment (increase).....		1,543,752 52	
Real estate (increase).....		5 50	
Equipment notes decreased (see page 20 of pamphlet report).....		1,051,541 00	
Collateral gold trust notes, due April 1, 1909, decreased (see page 20 of pamphlet report).....		6,000,000 00	
Total.....		11,197,857 20	
Balance, cash on hand June 30, 1909.....			\$3,211,108 09

FUNDED AND OTHER FIXED INTEREST-BEARING DEBT—CHANGES DURING YEAR ENDED JUNE 30, 1909.

Funded debt, equipment and other notes, June 30, 1908:			
Funded debt (includes \$4,941,000 first and refunding mortgage gold bonds pledged as security for notes).....			\$191,850,000 00
Equipment notes.....			6,551,541 00
Collateral trust gold notes, due April 1, 1909.....			6,000,000 00
Total.....			\$204,401,541 00

This has been changed during the year as follows:

Funded Debt Increased:			
By the issue of the Chicago, Rock Island & Pacific Railway Co.'s first and refunding mortgage gold bonds, viz:			
For additions, improvements and equipment, 1909 fund.....			\$2,500,000 00
For an equal amount of general mortgage gold bonds, issued January 1, 1909, for additions and improvements, said general mortgage gold bonds having been deposited with trustees of first and refunding gold bond mortgage.....			1,000,000 00
For redemption of matured obligations:			
The Chicago, Rock Island & Pacific Railway Co.'s gold bonds of 1902, series G, matured May 1, 1909, 1,494,000 00			
Choctaw, Oklahoma & Gulf Railroad Co.'s equipment trust notes, matured as follows:			
August 1, 1908, series B.....	\$75,000 00		
April 1, 1909, series C.....	220,000 00		
Total.....			295,000 00
Less:			
By the redemption of matured obligations as follows:			
The Chicago, Rock Island & Pacific Railway Co.'s gold bonds of 1902, matured May 1, 1909.....	\$1,494,000 00		
Little Rock Bridge Company's bonds, matured June 1, 1909.....	20,000 00		
Total.....			1,514,000 00
Total.....			\$3,775,000 00

Equipment Notes Decreased:

By the redemption of matured obligations as follows:

The Chicago, Rock Island & Pacific Railway Co.'s equipment 4½ per cent. gold notes, matured as follows:			
August 1, 1908.....	\$225,000 00		
February 1, 1909.....	325,000 00		
Total.....			\$550,000 00
The Chicago, Rock Island & Pacific Railway Co.'s equipment series B 6 per cent. notes, matured as follows:			
October 15, 1908.....	\$46,541 00		
April 15, 1909.....	60,000 00		
Total.....			106,541 00
Choctaw, Oklahoma & Gulf Railroad Co.'s equipment trust notes as above.....			295,000 00
Collateral Trust Notes, Due April 1, 1909, Decreased:			
By the redemption of these notes April 1, 1909.....	6,000,000 00		
Total.....			7,051,541 00
Net decrease in funded and other fixed interest bearing debt.....			3,276,541 00
Funded debt and equipment notes, June 30, 1909:			
Funded debt.....	\$195,625,000 00		
Equipment notes.....	5,900,000 00		
Total.....			\$201,525,000 00

FRANCHISES AND PROPERTY—CHANGES DURING YEAR ENDED JUNE 30, 1909.

Balance, June 30, 1908, as per balance sheet, page 14 of pamphlet report.....\$29,685,627 88

Cost of additions and improvements for year ended June 30, 1908, transferred to franchises and property.....\$3,902,698 07

Changes During the Year:			
Additions:			
Disbursements for construction and equipment of Rock Island, Arkansas & Louisiana Railroad Co.'s property.....			\$122 00
Disbursements for old construction liabilities of the Choctaw, Oklahoma & Gulf Railroad Co.....			15,123 56
Disbursements for additions and improvements to mines of the Choctaw, Oklahoma & Gulf Railroad Co.....			26,465 41
Disbursements for construction of track from T. & P. crossing, Dallas, Tex., to connection with H. & T. C. R. R., Dallas, Tex.....			1,153 20
Disbursements for additional and improved equipment:			
1 wrecking crane.....			\$12,187 10
1 steam locomotive hoist crane.....			7,592 54
1 scale test car (built at shops).....			1,147 19
Total.....			\$20,926 74
New appliances for existing equipment, required by Federal and State laws.....			\$47,000 54
Other new appliances for existing equipment.....			6,242 36
Total.....			53,242 90
Deductions:			
Sale of land in South Chicago, Ill.....			\$64,100 00
Value of equipment destroyed, dismantled or sold during the past two fiscal years (exclusive of equipment which, under mortgages or equipment trust agreements, must be replaced). Such value, less salvage, was charged to operating expenses and profit and loss.....			2,907,808 83
Adjustment of erroneous charges to franchises and property.....			8,008 04
Total changes during the year (decrease).....			2,979,916 87
Total increase in franchises and property.....			\$1,029,815 01

Balance, June 30, 1909, as per balance sheet page 14 pamphlet report.....\$29,685,627 88

Figures in *italics* denote credits.

COMMODITY STATISTICS—REVENUE FREIGHT ONLY—YEAR ENDED JUNE 30, 1909, COMPARED WITH PREVIOUS YEAR.

	Tons carried, 1908-09.	P. C.	Tons carried, 1907-08.	P. C.	Increase, Number.	Decrease, P. C.
Products of agriculture:						
Corn.....	1,043,536	6.09	1,104,784	6.96	61,186	5.54
Wheat.....	792,969	4.62	642,781	4.05	150,188	23.37
Oats.....	456,999	2.66	561,361	3.53	104,752	18.66
Other grain.....	150,120	.88	112,284	.71	37,836	33.70
Flour.....	552,791	3.22	538,947	3.39	13,844	2.57
Other mill products.....	335,480	1.96	291,016	1.83	44,464	15.28
Hay and straw.....	152,707	.89	167,672	1.06	14,965	8.92
Cotton.....	129,922	.76	116,813	.74	13,109	11.22
Fruit and vegetables.....	396,262	2.31	383,042	2.41	13,221	3.45
Other agricultural products.....	275,792	1.61	268,059	1.69	7,733	2.88
Total.....	4,286,251	25.00	4,186,759	26.37	99,492	2.38
Animals and animal products:						
Live stock.....	1,004,008	5.86	951,776	5.99	52,232	5.49
Dressed meats.....	127,906	.75	102,925	.65	24,981	24.27
Other packing-house products.....	76,821	.45	86,866	.55	9,765	11.28
Poultry, game and fish.....	61,652	.36	68,257	.47	6,605	9.68
Wool.....	4,941	.03	5,931	.04	990	16.63
Hides and leather.....	21,906	.12	14,623	.09	7,286	49.83
Other animal products.....	32,605	.19	27,378	.17	5,227	19.09
Total.....	1,329,842	7.76	1,257,476	7.92	72,366	5.75
Products of mines:						
Anthracite coal.....	166,510	.97	200,257	1.26	33,747	16.85
Bituminous coal.....	3,229,249	18.83	2,915,168	18.36	314,081	19.77
Coke.....	100,431	.59	153,210	.97	52,779	34.45
Ores.....	135,732	.79	97,293	.61	38,439	39.51
Stone, sand and other like articles.....	1,196,341	6.98	875,417	5.50	322,924	36.97
Other mineral products.....	195,125	1.14	177,995	1.12	17,130	9.62
Total.....	5,023,988	29.30	4,417,340	27.82	606,648	13.72
Products of forests:						
Lumber.....	1,866,539	10.89	1,654,957	10.42	211,582	12.78
Other forest products.....	288,694	1.68	292,051	1.84	3,447	1.18
Total.....	2,155,233	12.57	1,947,008	12.26	208,225	10.69
Manufactures:						
Petroleum and other oils.....	161,312	.94	148,131	.93	13,181	8.90
Sugar and syrup.....	134,174	.78	116,792	.73	17,382	14.88
Iron (pig and bloom).....	131,496	.77	76,645	.48	54,851	71.53
Iron and steel rails.....	46,146	.27	61,534	.39	15,388	25.91
Other castings and machinery.....	169,487	.94	190,375	1.29	20,888	16.70
Bar and sheet metal.....	247,170	1.44	188,344	1.19	58,826	31.23
Cement, brick and lime.....	1,013,104	5.91	811,089	5.11	202,015	24.91
Agricultural implements.....	151,092	.88	139,310	.88	11,782	8.46
Wagons, carriages, tools, etc.....	81,476	.47	75,676	.48	5,800	7.66
Wines, liquors and beers.....	79,951	.41	97,618	.61	17,667	27.32
Household goods and furniture.....	163,825	.99	177,972	1.11	14,147	8.62
Other manufactures.....	743,625	4.34	704,060	4.81	39,565	5.62
Total.....	3,110,958	18.14	2,845,536	17.92	265,422	9.33
Other commodities:						
Merchandise.....	1,160,186	6.77	1,090,032	6.87	70,154	6.44
Miscellaneous.....	79,889	.46	133,495	.84	53,606	40.16
Total.....	1,240,075	7.23	1,223,527	7.71	16,548	1.35
Grand total.....	17,145,657	100.00	15,877,646	100.00	1,268,011	7.99

*All less than carload shipments.

†All carload shipments of commodities not mentioned above.

EXTRACTS FROM

THIRTEENTH ANNUAL REPORT

OF THE

St. Louis and San Francisco Railroad Co.

FISCAL YEAR ENDED JUNE 30, 1909.

To the Stockholders:

The Board of Directors herewith submit their report of the operations and affairs of the St. Louis & San Francisco Railroad Company's Lines (exclusive of the Chicago & Eastern Illinois Railroad) for the fiscal year ended June 30, 1909.

The results of operation for the fiscal year were as follows:

Operating revenue (increase \$2,389,005.55, or 6.7 per cent.)	\$38,195,737 66
Operating expenses (increase \$156,728.65, or six-tenths of 1 per cent.)	25,164,014 40
Net operating revenue (increase \$2,232,276.90, or 20.7 per cent.)	\$13,031,723 26
Taxes	1,544,604 00
Miscellaneous income	\$11,487,119 26
Total income	\$12,896,911 04
Interest, rentals and other fixed charges	11,568,325 70
Net income after providing for all charges	\$1,328,585 34
Dividends paid—4 per cent. on first preferred stock	199,742 12
Surplus carried to profit and loss	\$1,128,843 22

A comparative Income Account showing the increase or decrease for the year of each class of earnings and expenses will be found on page 14 of pamphlet report.

MILEAGE OPERATED.

The average main track mileage operated during the year was 5251.06 miles, being an increase over the average mileage operated in preceding year of 186.90 miles.

The total mileage operated at June 30, 1909, was 5,253.49 miles. Being an increase over preceding year of 189.33 "

This increase is due to the taking over from construction as of July 1, 1908, the	
Benumont, Sour Lake & Western Railway	116.84 "
Orange & Northwestern Railroad	61.55 "
And as of September 21, 1908, the	
Carrollton-Irving Cut-Off (under trackage agreement)	10.94 "
Total increase	189.33 "

For details of the Main Track Mileage owned, operated and under construction at June 30, 1909, see pages 74, 75 and 76 of pamphlet report.

CAPITAL STOCK.

There were no changes during the year in the amount of capital stock issued and outstanding. The amount remains the same as at the reorganization of the Company in 1896.

FUNDED DEBT AND EQUIPMENT BONDS AND NOTES.

The total funded debt at June 30, 1908, was	\$189,890,717 74
The total equipment trust bonds and notes at June 30, 1908, was	17,668,582 19
Total	\$207,559,300 93
The total funded debt at June 30, 1909, was	\$199,339,619 30
The total equipment trust bonds and notes at June 30, 1909, was	15,032,551 99
Total	214,372,171 29

The net increase in funded debt and equipment notes during the fiscal year was \$6,813,771 36

\$999,900 of the five-year 4½ per cent. notes due December 1, 1908, were redeemed on that date, and the balance, \$6,125,000, were by agreement extended for one year to December 1, 1909. (The extended notes were paid on August 6, 1909.)

Cash for the redemption at maturity of \$15,529,928.83 St. Louis, Memphis & Southeastern Railroad Company five-year 4½ per cent. gold bonds was deposited prior to June 1, 1909, with the Bankers' Trust Company, New York. At August 31, 1909, all but \$62,000 had been presented and paid.

\$35,000,000 of the general lien 5 per cent. gold bonds were sold during the year and the proceeds applied to the payment of matured underlying lien bonds, equipment obligations and floating debt.

There will be found on pages 19 and 20 of pamphlet report statement showing in detail the amount of new issues, as well as the amount of bonds and equipment obligations redeemed or exchanged, and on page 27 of pamphlet report will be found the amount of bonds remaining in the treasury as a current asset.

GENERAL.

A trackage agreement dated February 15, 1909, was made with the Louisiana Railway & Navigation Company for trackage rights between Baton Rouge and New Orleans, La., 77.51 miles. This will give your Company the shortest route between Houston, Texas, and New Orleans, La.

Statement showing the details of the expenditures for additions and improvements to the property during the year will be found on pages 23 to 26 of pamphlet report.

The most important addition was the new engine and car shops at Springfield, Mo., which were completed at the close of the fiscal year and placed in operation on July 5, 1909.

The report of the industrial department for the year shows a very satisfactory increase in the number of industrial plants located on the Company's tracks during the year. There were located 327 industries, employing 8710 men and costing \$7,330,500. It is estimated that these new industries will load in and out over 50,000 carsloads per annum.

The operating revenue per mile of road increased \$203.41 over preceding year, while the operating expenses decreased \$145.91 per mile, making an increase of \$349.32 in the net operating revenue per mile of road.

Statements showing the Condensed Balance Sheet, Income, and Profit and Loss Accounts and Statistical Statements, each including the figures of the Chicago & Eastern Illinois Railroad Company, will be found on pages 45 to 76 of pamphlet report.

It was not deemed necessary by your Directors to incur the expense of having the usual expert examination of the books and accounts of the Company made at the close of the fiscal year, for the reason that the books and accounts are kept in accordance with the Interstate Commerce Commission regulations and are subject to inspection by experts of the Commission.

Acknowledgment is hereby made of the faithful and efficient service rendered by officers and employees during the year.

By order of the Board of Directors.

October 1, 1909.

A. J. DAVIDSON, President.

STATEMENTS AND STATISTICS.

NOTE.—In the following statements all revenues, operating expenses, other income and train and engine mileage for the year ended June 30, 1909, are stated in accordance with the classifications required by the Interstate Commerce Commission, effective July 1, 1908. To furnish proper comparisons, the corresponding figures for the year ended June 30, 1908, are restated where necessary.

ST. LOUIS & SAN FRANCISCO RAILROAD LINES.—INCOME ACCOUNT, FISCAL YEAR ENDED JUNE 30, 1909, COMPARED WITH PREVIOUS YEAR.

	1908-09.	1907-08.	Increase.	Decrease.
	5,251.06	5,064.16	Amount. P. ct.	Amount. P. ct.
Average mileage operated			186.90 3.7	
Operating Revenue:				
Freight	\$25,618,875 74	\$23,976,296 87	\$1,642,578 87	6.9
Passenger	9,655,885 73	8,827,036 90	828,848 83	8.2
Mail	1,002,335 00	979,927 21	22,407 79	2.3
Express	1,133,291 29	1,129,153 27	4,138 02	0.4
Miscellaneous	543,535 43	557,149 04	\$13,563 61	2.4
Total transportation revenue	\$37,953,973 19	\$35,569,563 29	\$2,384,409 90	6.7
Revenue from operation other than transportation	241,764 47	236,568 82	5,195 65	2.2
Total operating revenue	\$38,195,737 66	\$35,806,132 11	\$2,389,605 55	6.7
Operating Expenses:				
Maintenance of way and structures	\$5,094,615 70	\$4,671,416 27	\$423,199 43	9.1
Maintenance of equipment	4,638,515 71	4,559,107 25	79,408 46	1.7
Traffic expenses	894,574 17	823,678 98	61,195 19	7.3
Transportation expenses	13,294,083 88	13,663,532 92	\$369,549 04	2.7
General expenses	1,241,924 74	1,279,459 33	\$37,535 59	2.9
Total operating expenses	\$25,164,014 40	\$25,007,285 75	\$156,728 65	0.6
Net operating revenue	\$13,031,723 26	\$10,798,846 36	\$2,232,876 90	20.7
Taxes	1,544,604 00	948,414 62	596,189 38	62.9
Operating income	\$11,487,119 26	\$9,850,431 74	\$1,636,687 52	16.6
Miscellaneous Income:				
Outside operations		\$32,078 81	\$32,078 81	
Hire of equipment	\$305,668 02	\$55,145 24	149,537 22	32.9
Other income	1,715,359 80	1,550,141 86	\$165,217 94	12.0
Total miscellaneous income	\$1,409,791 78	\$1,462,917 81	\$53,126 03	3.6
Total income	\$12,896,911 04	\$11,313,349 55	\$1,583,561 49	14.0
Interest	\$6,620,102 33	\$6,118,752 18	\$501,350 15	8.2

Rentals and Sinking Funds:				
Interest on guaranteed securities	2,591,631 12	2,564,203 43	27,427 69	1.1
Other rentals and sinking funds	721,710 25	536,445 80	185,264 45	34.5
Dividends on trust certificates, the Kansas City, Fort Scott & Memphis Railway	540,400 00	540,400 00		
Dividends on trust certificates, Chicago & Eastern Illinois Railroad	1,094,482 00	1,094,482 00		
Total charges	\$11,568,325 70	\$10,854,283 41	\$714,042 29	6.6
Available for dividends	\$1,328,585 34	\$459,066 14	\$869,519 20	189.4

Dividends:				
Four per cent. on first preferred stock	199,742 12	199,742 12		
Surplus carried to credit of profit and loss	\$1,128,843 22	\$259,324 02	\$869,519 20	335.3

Figures in italics denote debits.

NOTE.—To preserve comparisons the revenue and operating expenses and other figures for year 1907-08 are restated hereon to conform with the classification of the Interstate Commerce Commission, effective July 1, 1908.

ST. LOUIS & SAN FRANCISCO RAILROAD LINES.—GENERAL PROFIT AND LOSS ACCOUNT AND ADJUSTMENTS THEREIN, JUNE 30, 1908, TO JUNE 30, 1909.

	Credit.	Debit.
Balance at credit, June 30, 1908	\$4,488,490 71	
Surplus for the year ended June 30, 1909	\$1,128,843 22	
Sundry adjustments not affecting current year's income	5,528 51	
Total Credit	\$5,622,862 44	
Annual instalment from franchise and property account, on account of difference between the cost of underlying bonds refunded and the proceeds of refunding bonds sold, and the commissions paid therefor (1902 refunding)		\$150,000 00
Proportion for the year of discount on securities sold, and expenditures in connection with listing, certifying and issuing new bonds for refunding purposes (1908 refunding)		512,163 11
Depreciation in the value of equipment destroyed and dismantled during current fiscal year		946,378 99
Total Debit		\$1,608,542 10
Balance		4,014,320 34
		\$5,622,862 44
By Balance at credit, June 30, 1909		\$4,014,320 34

ST. LOUIS & SAN FRANCISCO RAILROAD LINES.—FREIGHT TRAFFIC STATISTICS, YEAR ENDED JUNE 30, 1909, COMPARED WITH PREVIOUS YEAR.

	1908-09.	1907-08.	Increase.	Decrease.
	\$.0101	\$.0097	\$.0004	
Revenue per ton mile				
Revenue per ton	1.569	1.569		
Revenue per train mile	2.222	2.065	.157	
*Revenue per car mile	.120	.111	.009	
Revenue per mile of road	\$4,878.80	\$4,734.51	\$144.29	
Number of tons per train mile—revenue freight	220.30	212.30	8.00	
Number of tons per train mile—company freight	36.40	30.35	6.05	
Number of tons per train mile—all freight	256.70	242.65	14.05	
Number of tons per loaded car mile—revenue freight	16.88	17.13	.25	
Number of tons per loaded car mile—company freight	2.79	2.45	.34	
Number of tons per loaded car mile—all freight	19.67	19.58	.09	
Number of cars per train—loaded	13.05	12.37	.68	
Number of cars per train—empty	5.43	6.15	.72	
Number of cars per train—all	18.48	18.52	.04	
Average haul per ton—revenue freight (in miles)	155.54	161.40	5.86	
Average haul per ton—company freight (in miles)	124.75	120.37	4.38	
Average haul per ton—all freight (in miles)	150.29	154.90	4.61	
Density of ton miles, per mile of road—revenue freight	483.618	496,842	13,224	

*Excludes caboose car mileage.

ST. LOUIS & SAN FRANCISCO RAILROAD LINES.—PASSENGER TRAFFIC AND PER MILE OF ROAD STATISTICS, YEAR ENDED JUNE 30, 1909, COMPARED WITH PREVIOUS YEAR.

	Passenger Traffic.		Increase.	Decrease.
	1908-09.	1907-08.		
Revenue per passenger mile.....	\$.0207	\$.0215		\$.0008
Revenue per passenger.....	\$.9103	\$ 1.0592		\$.1489
Revenue per train mile (excluding mail and express).....	\$ 1.0430	\$.9934	\$.0496	
Revenue per train mile (including mail and express).....	\$ 1.2737	\$ 1.2282	\$.0455	
Revenue per car mile.....	\$.3111	\$.3088	\$.0023	
Revenue per mile of road (excluding mail and express).....	\$1,838.84	\$1,762.79	\$ 76.05	
Revenue per mile of road (including mail and express).....	\$2,245.55	\$2,179.26	\$ 66.29	
Number of passengers per train mile.....	50.71	46.09	4.62	
*Number of passengers per car mile.....	15.13	14.33	.80	
Average distance carried (in miles).....	44.26	49.14	4.88	
Number of cars per train.....	4.82	4.83	.01	
Density of passenger miles, per mile of road.....	89,463	81,786	7,677	
Per Mile of Road.				
Total operating revenue.....	\$7,273.91	\$7,070.50	\$203.41	
Operating expenses.....	4,792.18	4,938.09		\$145.91
Net revenue.....	\$2,481.73	\$2,132.41	\$349.32	
Other income.....	288.48	288.88		20.40
Total income.....	\$2,770.21	\$2,421.29	\$348.92	
Taxes.....	\$294.15	\$187.28	\$106.87	
Rentals.....	733.90	718.88	15.02	
Fixed charges.....	1,469.15	1,424.38	44.77	
Total charges and taxes.....	\$2,497.20	\$2,330.64	\$166.56	
Balance.....	\$253.01	\$90.65	\$162.36	

*Based on cars carrying passengers.

ST. LOUIS & SAN FRANCISCO RAILROAD LINES.—COMMODITY STATISTICS (REVENUE FREIGHT ONLY), YEAR ENDED JUNE 30, 1909, COMPARED WITH PREVIOUS YEAR.

Commodities.	Tons.		Tons.		Increase.		Decrease.	
	No.	P. ct.	No.	P. ct.	No.	P. ct.	No.	P. ct.
Products of Agriculture:								
Corn.....	409,633	2.51	406,590	2.66	3,043	.75		
Wheat.....	382,479	2.34	355,743	2.20	26,736	13.92		
Oats.....	126,154	.77	88,886	.58	37,268	41.91		
Other grain.....	24,967	.15	10,025	.07	14,942	149.05		
Flour.....	212,907	1.91	311,647	2.04	98,740	46.39		
Other mill products.....	322,154	1.36	184,105	1.21	138,049	20.67		
Hay and straw.....	198,096	1.21	229,364	1.50	31,268	13.63		
Tobacco.....	19,185	.12	7,529	.05	11,656	154.83		
Cotton.....	314,265	1.93	248,190	1.62	66,075	26.62		
Fruit and vegetables.....	222,911	1.37	216,727	1.42	6,184	2.85		
Other agricultural products.....	352,633	2.16	272,333	1.78	80,300	29.49		
Total.....	2,584,484	15.83	2,311,148	15.13	273,336	11.83		
Animals and Animal Products:								
Live-stock.....	451,635	2.77	414,012	2.71	37,623	9.09		
Dressed meats.....	28,224	.17	26,468	.18	1,756	6.63		
Other packing-house products.....	65,659	.40	71,606	.47	5,947	8.43		
Poultry, game and fish.....	20,720	.13	23,066	.15	2,346	10.17		
Wool.....	912	.00	632	.00	280	44.30		
Hides and leather.....	9,358	.06	6,529	.04	2,829	43.33		
Other animal products.....	35,590	.22	29,042	.19	6,548	22.56		
Total.....	612,008	3.75	571,355	3.74	40,653	7.11		
Products of Mines:								
Anthracite coal.....	231	.00	163	.00	68	41.72		
Bituminous coal.....	4,620,357	28.30	4,844,523	31.71	224,166	4.61		
Coke.....	124,797	.76	137,842	.90	13,045	9.46		
Ores.....	277,708	1.70	216,872	1.42	60,836	28.05		
Stone, sand and other like articles.....	984,030	6.03	743,350	4.87	240,680	32.38		
Other mineral products.....	414,072	2.54	472,135	3.10	58,063	12.29		
Total.....	6,421,195	39.33	6,414,885	42.00	6,310	.10		
Products of Forest:								
Lumber.....	2,430,461	14.89	1,810,871	11.85	619,590	34.22		
Other forest products.....	1,282,323	7.85	1,273,383	8.34	8,940	.70		
Total.....	3,712,784	22.74	3,084,254	20.19	628,530	20.38		
Manufactures:								
Petroleum and other oils.....	239,130	1.46	141,611	.93	97,519	68.86		
Sugar and syrup.....	50,472	.31	47,421	.31	3,051	6.43		
Iron (pig and bloom).....	106,152	.65	157,340	1.03	51,188	32.54		
Iron and steel rails.....	32,241	.20	63,596	.41	31,355	49.30		
Other castings and machinery.....	49,163	.30	48,721	.32	441	.91		
Bar and sheet metal.....	35,196	.16	48,572	.32	13,376	46.13		
Cement, brick and lime.....	931,172	5.70	798,755	5.22	132,417	16.57		
Agricultural implements.....	25,479	.16	27,763	.18	2,284	8.23		
Wagons, carriages, tools, etc.....	24,296	.15	34,661	.23	10,365	29.90		
Wines, liquors and beers.....	35,556	.22	43,635	.28	7,779	17.83		
Household goods and furniture.....	96,972	.59	98,943	.65	1,971	1.99		
Other manufactures.....	545,360	3.34	572,790	3.75	27,430	4.79		
Total.....	2,162,458	13.24	2,083,868	13.64	78,590	3.77		
Other Commodities:								
*Merchandise.....	787,646	4.83	718,422	4.70	69,224	9.64		
†Miscellaneous.....	46,147	.28	91,687	.60	45,540	49.67		
Total.....	833,793	5.11	810,109	5.30	23,684	2.92		
Grand total.....	16,326,727	100.00	15,275,619	100.00	1,051,108	6.88		

*All less than carload shipments.
†All carload shipments of commodities not mentioned above.

ST. LOUIS & SAN FRANCISCO RAILROAD LINES.—CONDENSED INCOME ACCOUNT FOR THE TEN YEARS ENDED JUNE 30, 1909.

Years.	Average mileage operated.	Gross income.	Operating expenses and all other deductions from income.	Total net income.
1900.....	1,400.79	\$8,101,248.54	\$5,028,552.93	\$3,072,695.61
1901.....	1,686.62	10,284,867.38	6,373,764.79	3,911,102.59
1902.....	3,252.35	21,818,042.87	14,319,004.41	7,499,038.46
1903.....	3,675.23	25,032,813.84	16,797,447.97	8,235,365.87
1904.....	4,216.88	27,779,843.91	18,853,252.04	8,926,591.87
1905.....	5,030.45	30,790,353.03	20,667,003.65	10,123,349.38
1906.....	5,068.92	33,679,316.45	22,144,105.95	11,535,210.50
1907.....	5,061.72	40,127,172.10	26,356,516.10	13,770,656.00
1908.....	5,064.16	37,354,689.11	26,577,785.36	10,776,903.75
1909.....	5,251.06	39,606,529.44	27,430,328.65	12,176,200.79
Interest on funded debt and equipment notes, etc.				
1900.....	\$2,176,335.00	\$396,360.61	\$530,000.00	\$376,360.61
1901.....	2,281,803.32	1,629,239.27	690,000.00	1,029,239.27
1902.....	4,816,259.86	2,882,778.60	1,210,581.06	1,472,197.54
1903.....	5,331,026.22	2,904,339.65	2,289,364.62	634,975.03
1904.....	6,157,852.07	2,768,739.80	2,344,844.12	423,895.68
1905.....	7,494,638.96	2,628,710.43	2,444,324.12	184,386.21
1906.....	7,591,192.87	3,944,017.63	2,154,624.12	1,789,393.51
1907.....	7,968,190.71	5,793,465.29	1,834,624.12	3,958,841.17
1908.....	8,682,955.61	2,093,948.14	1,834,624.12	259,324.02
1909.....	9,211,733.45	2,063,467.34	1,834,624.12	1,128,843.22
Less dividends declared as per income account statements.				
1900.....		\$530,000.00		\$530,000.00
1901.....		1,629,239.27		1,629,239.27
1902.....		1,210,581.06		1,210,581.06
1903.....		2,289,364.62		2,289,364.62
1904.....		2,344,844.12		2,344,844.12
1905.....		2,444,324.12		2,444,324.12
1906.....		2,154,624.12		2,154,624.12
1907.....		1,834,624.12		1,834,624.12
1908.....		1,834,624.12		1,834,624.12
1909.....		1,834,624.12		1,834,624.12
Balance of income carried to profit and loss.				
1900.....		\$376,360.61		\$376,360.61
1901.....		1,029,239.27		1,029,239.27
1902.....		1,472,197.54		1,472,197.54
1903.....		634,975.03		634,975.03
1904.....		423,895.68		423,895.68
1905.....		184,386.21		184,386.21
1906.....		1,789,393.51		1,789,393.51
1907.....		3,958,841.17		3,958,841.17
1908.....		259,324.02		259,324.02
1909.....		1,128,843.22		1,128,843.22

ST. LOUIS & SAN FRANCISCO RAILROAD LINES (INCLUDING C. & E. I. R. R.).—INCOME ACCOUNT YEAR ENDED JUNE 30, 1909.

	1908-09.	1907-08.	Increase.	Decrease.
Average mileage operated.....	6,216.74	6,021.26	195.48	
Operating Revenue:				
Freight.....	\$33,624,468.61	\$32,469,683.84	\$1,154,784.77	
Passenger.....	11,322,866.73	10,907,340.64	415,526.09	
Mail.....	1,125,336.47	1,100,188.65	25,147.82	
Express.....	1,410,897.32	1,378,091.78	32,805.54	
Miscellaneous.....	661,712.47	674,451.78		\$12,739.31
Total transportation revenue.....	\$48,145,271.60	\$46,259,756.69	\$1,885,515.51	
Revenue from operation other than transportation.....	\$20,085.05	\$29,107.42		\$9,022.37
Total operating revenue.....	\$48,165,356.65	\$46,288,864.11	\$1,876,492.54	
Operating Expenses:				
Maintenance of way and structures.....	\$6,089,325.37	\$5,877,127.27	\$212,198.10	
Maintenance of equipment.....	6,302,275.14	6,168,811.08	133,464.06	
Traffic expenses.....	1,104,885.64	1,030,974.36	73,911.28	
Transportation expenses.....	16,929,769.65	17,580,167.55		\$650,397.90
General expenses.....	1,672,232.11	1,694,897.92		22,665.81
Total operating expenses.....	\$32,098,547.91	\$32,362,078.18		\$263,530.27
Net operating revenue.....	\$16,066,808.74	\$14,186,785.93	\$1,880,022.81	
Taxes.....	1,818,718.66	1,307,001.56	511,717.10	
Operating income.....	\$14,248,090.08	\$12,879,784.37	\$1,368,305.71	
Miscellaneous Income:				
Outside operations.....	\$19,942.23	\$19,925.16	\$17.07	
Hire of equipment.....	\$43,613.42	\$3,696.25		\$39,917.17
Other income.....	1,741,892.90	1,452,556.68	289,336.22	
Total miscellaneous income.....	\$1,785,448.55	\$1,476,582.09	\$308,866.46	
Total income.....	\$16,033,538.63	\$14,356,366.46	\$1,677,172.17	
Interest.....	\$8,812,273.99	\$8,298,552.89	\$513,721.10	
Rentals and Sinking Funds:				
Interest on guaranteed securities.....	2,591,631.12	2,564,203.43	27,427.69	
Other rentals and sinking funds.....	1,480,941.94	1,239,268.82	241,673.12	
Dividends on trust certificates, the Kansas City, Fort Scott & Memphis Railway.....	540,400.00	540,400.00		
Dividends on trust certificates, Chicago & Eastern Illinois Railroad.....	1,094,482.00	1,094,482.00		
Total charges.....	\$14,519,723.06	\$13,738,907.14	\$780,815.92	
Available for dividends.....	\$1,506,698.28	\$500,811.90	\$1,005,886.38	
Dividends to Stockholders:				
Four per cent. on first preferred stock of St. Louis & San Francisco Railroad Co.....	\$199,742.12	\$199,742.12		
Six per cent. on preferred stock of the Chicago & Eastern Illinois Railroad Co. to stockholders other than St. Louis & San Francisco Railroad Co.....	157,140.00	157,140.00		
Total dividends.....	\$356,882.12	\$356,882.12		
Surplus carried to credit of profit and loss.....	\$1,149,816.16	\$143,929.78	\$1,005,886.38	

Figures in *italics* denote debit.

NOTE.—To preserve comparisons the revenue and operating expenses and other figures for year 1907-08 are restated hereon to conform with the classification of the Interstate Commerce Commission, effective July 1, 1908.

ST. LOUIS & SAN FRANCISCO RAILROAD LINES (INCLUDING C. & E. I. R. R.).—GENERAL PROFIT AND LOSS ACCOUNT AND ADJUSTMENTS THEREIN, JUNE 30, 1908, TO JUNE 30, 1909.

Credit.		
Balance at credit, June 30, 1908.....		\$5,469,465 50
Surplus for the year ended June 30, 1909.....		1,149,816 16
Total Credit.....		<u>\$6,619,281 96</u>
Debit.		
Annual installment from franchises and property account, on account of differences between the cost of underlying bonds refunded and the proceeds of refunding bonds sold, and the commissions paid therefor (1902 refunding).....		\$150,000 00
Proportion for the year of discount on securities sold and expenditures in connection with listing, certifying and issuing new bonds for refunding purposes.....		549,400 87
Depreciation in value of tracks taken up and equipment destroyed and dismantled during current fiscal year.....		1,988,411 31
Original cost of other property destroyed.....		4,032 48
Sundry adjustments not affecting current year's income.....		8,159 57
Total Debit.....		<u>\$1,800,004 23</u>
Balance.....		4,819,277 73
		<u>\$6,619,281 96</u>
By balance at credit, June 30, 1909.....		\$4,819,277 73

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh Mac-Rae & Co., Wilmington, N. C., for Week Ending November 1.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	70	71
Aiken Mfg. Co. (S. C.)	85	85
American Spinning Co. (S. C.)	155	155
Anderson Cotton Mills (S. C.)	56	60
Arkwright Mills (S. C.)	109 1/2	105
Augusta Factory (Ga.)	65	70
Avondale Mills (Ala.)	115	125
Belton Mills (S. C.)	119	121
Bibb Mfg. Co. (Ga.)	97	99
Brandon Mills (S. C.)	97	99
Cabarrus Cotton Mills (N. C.)	125	145
Chadwick-Hoskins Mfg. Co. (N. C.)	100	100
Chadwick-Hoskins Mfg. Co. (N. C.) Pfd.	102	102
Chiquola Mfg. Co. (S. C.)	165	167
Clifton Mfg. Co. (S. C.)	105	105
Clifton Mfg. Co. (S. C.) Pfd.	99	101
Clinton Cotton Mills (S. C.)	120	120
Columbus Mfg. Co. (Ga.)	93	98
Courtenay Mfg. Co. (S. C.)	97	100
Dallas Mfg. Co. (Ala.)	97	105
Darlington Mfg. Co. (S. C.)	74	76
Drayton Mfg. Co. (Ala.)	100	100
Eagle & Phenix Mills (Ga.)	135	135
Easley Cotton Mills (S. C.)	165	170
Enoree Mfg. Co. (S. C.)	52	62
Enoree Mfg. Co. (S. C.) Pfd.	96	100
Enterprise Mfg. Co. (Ga.)	90	90
Exposition Cotton Mills (Ga.)	240	240
Gaffney Mfg. Co. (S. C.)	75	81
Gainesville Cotton Mills (Ga.)	68	68
Granby Cot. Mills (S. C.) 1st Pfd.	60	60
Graniteville Mfg. Co. (S. C.)	100	165
Greenwood Cotton Mills (S. C.)	58 1/2	68
Grendel Mills (S. C.)	112	115
Henrietta Mills (N. C.)	100	100
King Mfg. Co. John P. (Ga.)	95	100
Lancaster Cotton Mills (S. C.)	125	146
Lancaster Cot. Mills (S. C.) Pfd.	97	100
Langley Mfg. Co. (S. C.)	96	100
Laurens Cotton Mills (S. C.)	120	135
Limestone Mills (S. C.)	150	175
Lockhart Mills (S. C.)	78	90
Lockhart Mills Pfd.	99	100
Loray Mills (N. C.) Pfd.	95	97 1/2
Marlboro Cotton Mills (S. C.)	63	84 1/2
Mayo Mills (N. C.)	166	185
Mills Mfg. Co. (S. C.)	100	100
Mills Mfg. Co. (S. C.) Pfd.	109	109
Monaghan Mills (S. C.)	123	125
Monarch Cotton Mills (S. C.)	109	112
Newberry Cotton Mills (S. C.)	120	140
Norris Cotton Mills (S. C.)	122	128
Olympia Cot. Mills (S. C.) 1st Pfd.	78	87 1/2
Orangeburg Mfg. Co. (S. C.) Pfd.	80	90
Orr Cotton Mills (S. C.)	100	101
Pacolet Mfg. Co. (S. C.)	100	101
Pacolet Mfg. Co. (S. C.) Pfd.	97	102
Pelzer Mfg. Co. (S. C.)	150	160
Piedmont Mfg. Co. (S. C.)	173	177
Poe Mfg. Co. (S. C.)	160	165
Richland Cot. Mills (S. C.) 1st Pfd.	45	45
Raleigh Cotton Mills (N. C.)	100	106
Roanoke Mills (N. C.)	153	165
Saxon Mills (S. C.)	127	127
Sibley Mfg. Co. (Ga.)	62 1/2	65
Spartan Mills (S. C.)	130	140
Springstein Mills (S. C.)	100	100
Tucpau Mills (S. C.)	250	250
Trion Mfg. Co. (Ga.)	140	140
Union-Buttalo Mills (S. C.) 1st Pfd.	72	73
Victor Mfg. Co. (S. C.)	130	130
Warren Mfg. Co. (S. C.)	92 1/2	95
Warren Mfg. Co. (S. C.) Pfd.	108	108
Washington Mills (Va.)	20	20
Washington Mills (Va.) Pfd.	106	106
Whitney Mfg. Co. (S. C.)	130	140
Williamson Mills (S. C.)	115	115
Wiscasset Mills (S. C.)	129	129
Woodruff Cotton Mills (S. C.)	140	155
Woodside Cotton Mills (S. C.)	96	100
Woodside Cot. Mills (S. C.) Pfd.	95	98

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending November 1.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	75	75
Aiken Mfg. Co. (S. C.)	85	85
American Spinning Co. (S. C.)	155	155
Arcadia Mills (S. C.)	95	95
Arkwright Cotton Mills (S. C.)	100	105
Augusta Factory (Ga.)	65	70
Avondale Mills (Ala.)	116	120
Belton Mills (S. C.)	120	120
Brogan Mills (S. C.)	30	30
Cannon Mfg. Co. (N. C.)	135	135
Cabarrus Cotton Mills (N. C.)	130	135
Chiquola Mfg. Co. (S. C.)	165	165
Clifton Mfg. Co. (S. C.)	105	110
Clinton Cotton Mills (S. C.)	120	120
Columbus Mfg. Co. (Ga.)	93	100
Courtenay Mfg. Co. (S. C.)	95	95
Dallas Mfg. Co. (Ala.)	99	100
Darlington Mfg. Co. (S. C.)	74	74
D. E. Converse Co. (S. C.)	100	105
Drayton Mills (S. C.)	90	100
Eagle & Phenix Mills (Ga.)	135	135
Easley Cotton Mills (S. C.)	165	165
Enoree Mfg. Co. (S. C.)	52	62
Enoree Mfg. Co. (S. C.) Pfd.	90	100
Enterprise Mfg. Co. (Ga.)	75	75
Exposition Cotton Mills (Ga.)	195	200
Gainesville Cotton Mills (Ga.)	60	65
Glenwood Cotton Mills (S. C.)	145	145
Gluck Mills (S. C.)	92	95
Graniteville Mfg. Co. (S. C.)	155	165
Grendel Mills (S. C.)	110	115
Hartsville Cotton Mills (S. C.)	150	155
Henrietta Mills (N. C.)	100	105
Inman Mills (S. C.)	105	110
Lancaster Cotton Mills (S. C.)	118	125
Lancaster Cot. Mills (S. C.) Pfd.	97	97
Langley Mfg. Co. (S. C.)	95	100
Laurens Mills (S. C.)	127	127
Limestone Mills (S. C.)	150	150
Lockhart Mills (S. C.)	80	80
Lockhart Mills (S. C.) Pfd.	98	98
Loray Cotton Mills (N. C.) Pfd.	92	94
Marlboro Cotton Mills (S. C.)	83	83
Mills Mfg. Co. (S. C.)	92	93
Molloy Mfg. Co. (S. C.)	105	105
Monaghan Mills (S. C.)	117	122
Monarch Cotton Mills (S. C.)	104	104
Newberry Cotton Mills (S. C.)	115	115
Ninety-Six Cotton Mills (S. C.)	135	135
Norris Cotton Mills (S. C.)	117	117
Orr Cotton Mills (S. C.)	116	116
Pacolet Mfg. Co. (S. C.)	95	100
Pelzer Mfg. Co. (S. C.)	154	154
Piedmont Mfg. Co. (S. C.)	175	175
Poe Mfg. Co. F. W. (S. C.)	155	155
Saxon Mills (S. C.)	125	125
Sibley Mfg. Co. (Ga.)	60	65

Spartan Mills (S. C.)	129	...
Tucpau Mills (S. C.)	250	...
Union-Buttalo (S. C.) 1st Pfd.	77	80
Union-Buttalo (S. C.) 2d Pfd.	30	35
Victor Mfg. Co. (S. C.)	132	136
Warren Mfg. Co. (S. C.)	92	98
Warren Mfg. Co. (S. C.) Pfd.	106	106
Washington Mills (Va.)	20	...
Whitney Mfg. Co. (S. C.)	130	...
Wiscasset Mills (N. C.)	135	...
Woodruff Cotton Mills (S. C.)	140	152
Woodside Cotton Mills (S. C.)	94	...
Watts Mills (S. C.)	84	90
Williamson Mills (S. C.)	117	...

FINANCIAL CORPORATIONS.

Ala., Birmingham.—Official: The Union Bank & Trust Co. incorporated; capital \$100,000. Ector H. Smith will be president.

Ala., Cullman.—The Leeth National Bank is reported organized and expects to begin business about January 1, 1910.

Ala., Mobile.—Official: The United States Guaranty Co. chartered; perpetual; capital \$500,000; surplus \$500,000; unassigned profit \$400,000; incorporators, Col. John V. Ryan, Mobile, Ala.; Judge Edwin R. Cochran, Wilmington, Del.; E. R. Devine, Wilmington, Del.

Ark., Little Rock.—Official: The National Consolidated Casualty Co. incorporated; capital \$115,475 paid in; surplus \$11,547.50; Thomas C. McRae, president, Prescott; J. J. Cress, vice-president, Gurdon; Joe P. Eagle, treasurer, Lonoke, and L. W. Coy, Jr., secretary.

Ark., Russellville.—Chartered: The Pope County Bank; capital \$25,000; H. W. Patrick, president; R. L. Smith, vice-president; Q. W. Ferguson, secretary and treasurer.

Ark., Searcy.—Official: The Union Bank & Trust Co. incorporated; capital \$50,000; W. H. Lightle, president; W. G. Caldwell, vice-president, and Jas. E. Lightle, secretary and treasurer.

Fla., Kissimmee.—The Citizens' Bank has filed application for a charter; A. E. Donegan, president, and H. W. Pfann, cashier.

Fla., Ocala.—A new bank is reported being organized by T. W. Shands of Gainesville, Fla., and others.

Ga., Atlanta.—Official: The Equitable Casualty Co. chartered; capital \$100,000 to \$500,000; surplus \$40,000; John S. Candler, president; J. J. Disodway, vice-president; Shepard Bryan, attorney.

Ga., Atlanta.—The Fulton National Bank, capital \$300,000, has elected officers thus: Dr. W. J. Blalock, president; Julius Bashinski, first vice-president; M. R. Emmons, second vice-president; A. B. Simms, cashier; directors, Dr. W. J. Blalock, Julius Bashinski, M. R. Emmons, A. B. Simms, Hoke Smith, W. F. Patillo, J. M. Stephens, R. J. Griffin, W. E. McCalla, W. O. Stamps, W. R. McClelland, W. A. Albright, W. W. Heaton of Waco, Ga.; L. B. Holt of Sandersville, J. Mowell Green and others.

Ga., Byromville.—Approved: Byrom National Bank; capital \$25,000. Organizers, S. B. Byrom, J. S. Byrom, W. H. Byrom, W. E. Dawson and R. S. English.

Ky., Corydon.—The Farmers' State Bank, capital \$15,000, has organized with directors thus: J. R. Sigler, president, and George H. Cates, vice-president; E. A. Barrett, J. F. Sigler, George L. Campbell, J. S. Tapp and G. B. Martin.

Ky., Lexington.—The Burley Tobacco & Insurance Co. has filed articles of incorporation; capital \$2,000,000. Clarence Lebus is president.

Ky., Ludlow.—The Ludlow Savings Bank has filed articles of incorporation; capital \$15,000. R. P. Ernst of Covington is interested.

La., New Orleans.—The People's Bank & Trust Co. has published its charter; capital \$400,000. Directors, John Alsina, Joseph Collins, Henri Cazentre, Eugene Ellis, Leon Irwin, John R. Juden, Jr., Julius Koch, O. La Cour, Orloff Lake, Edward S. Maunsell, Dr. R. Sauvage, J. M. Sherrouse, Albert Tujague, Philip Werlein, J. W. C. Wright, Leonard Krower, Charles E. Cormier, Albert J. La Place, Fernand May and Hy. H. Schwabacher.

Miss., Tylertown.—L. H. Ginn, G. H. Collins, H. D. Bickham of Hackley and D. C. Easley of McComb are reported organizing a new bank.

Mo., Springfield.—Chartered: The Bank of Greene County; capital \$25,000. Directors, C. W. Smith, F. A. Mounts, J. B. Smith, H. D. Smith and W. R. Self, all of Springfield, and J. F. Vincent of St. Louis.

N. C., Beaufort.—The Beaufort Insurance & Realty Co. of Beaufort has filed articles of incorporation; capital \$25,000. Incorporators, C. L. Duncan, A. F. Doane, Jr., N. E. Swann and N. W. Taylor.

N. C., East Bend.—The Yadkin Valley Bank has begun business; directors, Dr. W. G. Leak, president; John G. Huff, vice-president; J. Lee Norman, cashier; J. G. Smitherman, W. H. Speas, John A. Martin and Geo. Steelman.

N. C., Hendersonville.—The People's National Bank of Hendersonville has been authorized to begin business; capital \$150,000; John H. Carter, president; U. G. Staton and Charles French Tons, vice-presidents, and C. S. Fullbright, cashier.

N. C., Winston-Salem.—The Winston Investment Co. has been chartered with \$50,000 capital. Incorporators, A. F. Sams, J. J. Rogers and F. A. Moore.

Okla., Bartlesville.—The Union National Bank of Bartlesville has been authorized to begin business; capital \$100,000; Mortimer F. Stillwell, president; Howard Waber and R. D. Rood, vice-presidents; W. C. Raymond, cashier; H. C. Moore, assistant cashier.

Okla., Oklahoma City.—The Standard Abstract Co. has been chartered with \$50,000 capital. Directors, W. L. Peck, C. D. Andrews, W. J. Thompson, H. F. Carter and Eugene Scharr.

Okla., Oklahoma City.—The Oklahoma Bankers' Trust Co. is reported organized with \$200,000 capital. Among the stockholders are Jasper Sipes, R. A. Kleinschmidt, Layton, Smith & Hawk; R. L. Putnam, Prof. H. F. Rusch, S. J. Carpenter, T. W. Enders, Miss Margaret McKinley, J. T. Sturm, R. L. Forgan, J. A. Able, Mrs. Emma Miller, J. H. Crowover, Walter D. Caldwell, T. J. Rhodes and T. H. Lindley.

S. C., Camden.—The Camden Investment Co., capital \$25,000, has been incorporated by H. G. Garrison, J. W. Corbett, C. H. Yates, D. Wolfe, W. M. Shannon.

S. C., Chester.—The Planters' Bank, capital \$35,000, has organized by electing directors thus: D. P. Crosby, president; J. L. Abell, vice-president, and A. G. Thornton, cashier; R. E. Sims, T. M. Whisonan and J. M. Wise. Business is expected to begin about December 1.

S. C., Greenville.—The Butler Loan & Trust Co. has been granted a commission; capital \$1000. Incorporators, P. S. Butler and J. E. Liddell.

S. C., McColl.—The Merchants and Farmers' Bank, capital \$25,000, has organized with directors thus: W. H. Fletcher, president; John C. Fletcher, vice-president, and S. E. Liles, cashier; T. P. Tatum, N. Fletcher, Dr. J. C. Moore, Marion Adams and J. M. Hatch of McColl and J. P. Hamer of Tatum. Business is to begin about December 1. The above is officially confirmed.

Tenn., Ducktown.—An official letter confirms the report that the First National Bank has been authorized to begin business.

Tex., Center.—The Sabine Valley Abstract Co. has been chartered with \$6000 capital by T. C. Davis, Noble Weaver and T. M. Barham.

Tex., Clifton.—Chartered: The First Guaranty State Bank; capital \$10,000; incorporators, C. O. Nelson, Jr., H. J. Cureton, J. N. Colewick and others.

Tex., Tomball.—Chartered: The First State Bank; capital \$10,000. Incorporators, C. F. Hoffman, F. E. Pace and Louis S. Shrope.

Va., Warrenton.—Approved: The People's National Bank of Warrenton; capital \$50,000. Directors, John S. Gaines, S. C. Brittle, Robert T. Fisher, John T. Cockrill and E. M. Newton.

NEW SECURITIES.

Ala., Birmingham.—Jefferson county is reported to be considering an issue of road bonds.

Ala., Luverne.—Reports state that an election is to be held in Crenshaw county November 15 to vote bonds for road improvements.

Ala., Marion.—Petitions are reported being circulated in Perry county calling for an election to vote on \$150,000 of road bonds.

Ala., Montgomery.—Bids will be received until noon November 15 by Robert Tait, City Treasurer, for \$50,000 of 5 per cent 10-year paving bonds.

Ala., Tuscaloosa.—Voted: \$25,000 of 5 per cent 20-year additional sewer bonds.

Ark., Paragould.—Reports state that St. Francis drainage district will issue \$220,000 of bonds for construction of canal across Clay and Greene counties.

Fla., Bonifay.—Voted: \$15,000 of school-building bonds.

Fla., Jacksonville.—Bids will be received November 29 for \$1,000,000 of 30-year Duval county public road improvement bonds; date December 1, 1909; denomination \$1000; P. D. Cassidy is clerk.

Fla., Lakeland.—An official letter states that the election to vote on \$22,000 of water main, \$12,000 of well, \$6000 of light and \$25,000 of school bonds will be held November 22. John S. Edwards is Mayor.

Fla., Pensacola.—Bids will be received until noon November 24 by R. M. Bushnell, chairman of the Board of Bond Trustees, for \$100,000 of 4 per cent improvement bonds.

Fla., Pensacola.—Bids will be received until noon November 24 by R. M. Bushnell, chairman Board of Bond Trustees, for \$100,000 of 4 1/2 per cent improvement bonds.

Ky., Bellevue.—The report that an election is to be held November 2 to vote on \$37,000 of street-improvement and \$8000 of culvert 4 per cent bonds is officially confirmed. Jas. A. Cassidy is Mayor.

La., Edgard.—A. C. Bernard, Superintendent of School, will receive bids until November 12 for \$48,000 of 5 per cent school bonds of St. John the Baptist parish.

Miss., Gulfport.—John Nuveen & Co. of Chicago are reported to have purchased at \$1000 premium \$50,000 of 5 1/2 per cent 20-year water-works bonds.

Miss., Hazlehurst.—Reported that \$8000 of park and \$2000 of railroad-aid bonds will probably be issued.

Miss., Lambert.—November 2 bids will be opened for \$5000 of 6 per cent 10-20-year school-house bonds; denomination, \$500. U. B. Ross is Mayor and L. J. Lambert clerk.

Miss., Meridian.—The First National Bank of Cleveland, O., is reported to have purchased at par \$150,000 of street-paving bonds.

Miss., Meridian.—The First National Bank of Cleveland, O., is reported to have purchased at par \$150,000 of paving certificates.

Mo., Chillicothe.—Defeated: \$150,000 of water and light plant bonds.

Mo., Festus.—Bids will be opened November 25 for \$8000 of 5 per cent 10-20-year electric-light-improvement bonds; denomination, \$500. J. Scott Wolf is Mayor.

Mo., Joplin.—The report that bids will be received until November 6 for \$50,000 of 5 per cent 5-20-year sewer bonds has been officially confirmed; denomination, \$500. Address Julius A. Becker, City Treasurer, 117 West 4th street, Joplin.

N. C., Andrews.—Bids will be received until 4 P. M. November 30 for \$20,000 of 30-year water-works bonds; interest at 5, 5 1/2 and 6 per cent. Dr. H. N. Wells is Mayor.

N. C., Hendersonville.—Street-improvement bonds to the amount of \$20,000 are being offered for sale. Address Secretary, Board of Commissioners.

N. C., Newbern.—Bids will be received until the night of December 7 for \$50,000 of 5 per cent 30-year street-paving bonds. F. T. Patterson is City Clerk.

Okla., Addington.—Reported that an election is to be held to vote on \$10,000 of road and bridge bonds.

Okla., Capitol Hill.—Voted: \$45,000 of school-building bonds.

Okla., Durant.—Voted: \$20,000 of municipal light plant bonds. Defeated: \$10,000 of bridge bonds.

Okla., Grandfield.—Bids will be received until October 30 by J. B. Simpson, president of the board of trustees, for \$28,000 of 6 per cent 20-year water-works bonds.

Okla., Guthrie.—An election is to be held November 25, it is reported, to vote on \$50,000 of water-extension, \$30,000 of fire-department, \$25,000 of park and \$20,000 of sewer bonds.

Okla., Oklahoma City.—John Nuveen & Co. of Chicago are reported to have been awarded at \$9625 premium \$185,000 of 5 per cent 25-year sewer bonds.

Okla., Sapulpa.—Voted: \$200,000 of 25-year Creek county bridge bonds.

Okla., Sentinel.—Reported voted: Bonds for water-works.

Okla., Spiro.—Speer & Dow of Fort Smith, Ark., are reported to have purchased \$50,000 of 6 per cent 25-year water and light bonds.

Okla., Wilberton.—Reported voted: \$45,000 of school-building bonds.

Okla., Woodward.—Bids will be received until 7.30 P. M. November 29 for \$25,000 of 5 per cent 25-year water-works bonds. Address A. J. Velts, City Secretary.

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Northfork, Welch and Bluefield, W. Va.;
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TRANSMISSION ROPE

Tenn., Centerville.—Reported that the question of holding an election to vote on \$30,000 of water-works and electric-light bonds is under consideration.

Tenn., Knoxville.—Bids will be received until 9 A. M. November 6 by T. C. Thompson, Mayor, for the following 6 per cent. 15-year bonds: \$1267.71 of Paving District No. 127, \$2536.70 Paving District No. 90 and \$1688.10 of Paving District No. 130.

Tenn., Knoxville.—Ordinances have been adopted authorizing the issuing of the following bonds: \$5071.45 of District No. 76; \$5,560.33 of District No. 70; \$1496.30 of District No. 71; \$4307.13 of District No. 45; \$6935.33 of District No. 65; \$878.10 of Improvement District No. 73; \$5639.50 of Improvement District No. 69 5 per cent. bonds. John M. Brooks is Mayor.

Tenn., Memphis.—Bids will be received until 1 P. M. November 8 for \$260,000 of police station 4 per cent. 40-year bonds. Address Dave Halle, chairman; D. M. Armstrong, secretary; H. E. Craft, Police Station Building Commission.

Tenn., Mountain View (P. O. Knoxville).—Voted: \$20,000 of 5½ per cent. improvement bonds. J. N. Moore is Mayor.

Tex., Abilene.—City has authorized \$50,000 of 5 per cent. 40-year street-improvement bonds; date September 1, 1909; denomination \$1000. Address A. H. Herring.

Tex., Amarillo.—Reported that an election is to be held November 20 to vote on \$100,000 of school-building bonds.

Tex., Austin.—The Attorney-General has approved the following securities: \$650,000 of 4½ per cent. Fort Worth general improvement bonds; \$56,000 of 5 per cent. 20-40-year Temple water-works bonds; \$11,000 of 5 per cent. 20-40-year Newcastle Independent School District schoolhouse bonds; \$6300 of 5 per cent. 10-year Dallas county common school district No. 2 schoolhouse bonds; \$215,320 of 5 per cent. 20-40-year Burleson county improvement district No. 1 improvement bonds; \$3000 of 5 per cent. 5-40-year Jasper independent school district bonds; \$1300 of 5 per cent. 10-20-year school bonds of Grimes county common school district No. 23.

Tex., Bartlett.—An election is to be held to vote on \$8000 of 5 per cent. water-works bonds.

Tex., Beaumont.—An ordinance has been prepared authorizing the issue of \$100,000 of 5 per cent. 20-40-year schoolhouse building and repair bonds. Emmett A. Fletcher is Mayor and J. G. Sutton City Secretary.

Tex., Denton.—November 27 an election is to be held to vote on \$300,000 of road bonds of Justice Precinct No. 1.

Tex., Dublin.—Voted: \$20,000 of 5 per cent. 10-40-year sewerage bonds.

Tex., Fort Worth.—William H. Eddieleman of Fort Worth has purchased \$150,000 of the \$650,000 sewer bonds recently approved.

Tex., Gainesville.—Bids are being received by C. R. Pearman, County Judge, for \$100,000 of 4½ per cent. 10-40-year Cooke county road improvement bonds.

Tex., Galveston.—An election is to be held November 27 to vote on \$225,000 of bonds for construction and maintenance of a break-water and an embankment and retaining wall at Galveston; Lewis Fisher, Mayor-President, city of Galveston.

Tex., Granbury.—November 20 an election is to be held to vote on \$25,000 of road-improvement bonds of District No. 1.

Tex., Hempstead.—An election is to be held in Precinct 1, Waller county, to vote on \$25,000 of road bonds.

Tex., Marshall.—Bids will be received until 8 P. M. November 15 by H. S. Rice, City Secretary, for \$35,000 of 5 per cent. 10-40-year water improvement bonds.

Tex., Merkel.—The Commonwealth National Bank of Dallas is reported to have purchased at par and accrued interest \$25,000 of 5 per cent. 20-40-year water-works bonds.

Tex., Quanah.—Bids will be received until November 15 for \$26,000 of 5 per cent. 10-40-year additional water-works bonds. Alex. M. Lewis is Mayor.

Tex., Sherman.—An election is to be held, it is reported, to vote on \$12,000 of water-works and \$8000 of street-improvement bonds.

Tex., Terrell.—Voted: \$1500 of 5 per cent. 15-year bonds of School District No. 17, Kaufman county.

Tex., Timpson.—Reports state that a petition is to be filed with the Commissioners of Shelby county asking that an election be held to decide whether Road District No. 7 be created and bonds issued. It is thought \$50,000 in bonds will be voted.

Va., Big Stone Gap.—Voted: \$30,000 of 30-year street, sidewalks and road bonds.

Va., Big Stone Gap.—Voted: \$30,000 of 30-year sewer, jail, street and road bonds. They will soon be offered for sale. J. S. Wright is Town Clerk and W. H. Horton treasurer.

Va., Rustburg.—An official letter says that no steps have as yet been taken to put the question of the issuance of road bonds to a vote of the people of Campbell county; S. C. Goggin, clerk.

W. Va., Keyser.—Defeated: \$16,500 of water extension bonds.

W. Va., Keyser.—Defeated: \$15,000 and \$16,500 of water-supply bonds.

At Hendersonville, N. C., \$20,000 of street-improvement bonds are being offered for sale. Further particulars will be found in the advertising columns.

At Newbern, N. C., bids will be received until the night of December 7 for \$50,000 of 5 per cent. 30-year street-paving bonds. Further particulars will be found in the advertising columns.

FINANCIAL NOTES.

The Hartwell Bank at Hartwell, Ga., is reported to have converted into the First National Bank of Hartwell.

The Virginia Trust Co. of Richmond, Va., is reported to have voted to increase its capital from \$500,000 to \$1,000,000.

The Citizens' National Bank of Macon, Ga., is reported to have purchased the Central Georgia Bank of the same city.

The United States Fidelity & Guaranty Co. of Baltimore, Md., has voted to increase its capital from \$1,700,000 to \$2,000,000.

The Union Trust Co. of San Antonio, Tex., is reported to have opened a branch at Manor, Tex. W. E. Allison is cashier of the new bank.

The conversion of the Farmers' State Bank of Oklahoma City, Okla., into the Farmers' Bank of Oklahoma City has been approved; capital \$100,000.

The Dade County State Bank at West Palm Beach, Fla., is reported to have changed its name to the Pioneer Bank. E. N. Dimick is president.

The State Savings Bank of Birmingham, Ala., is reported to have changed its name to the Realty Loan Co. and increased its capital from \$35,000 to \$100,000.

The Exchange and the First National banks, both at Trenton, Tenn., are reported to have consolidated under the title of the First National Bank of Trenton.

The Continental Bank & Trust Co. of Shreveport, La., is reported to have absorbed the West End Bank and will establish a branch bank in West Shreveport with L. E.

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1909, shows loans and discounts, \$48,878,381; bonds, securities, etc., owned, including premium, \$5,800,289; capital stock paid in, \$11,277,698; surplus fund, \$4,508,009; undivided profits, less interest, taxes and expenses, \$2,522,984; total deposits, \$47,440,588; total resources, \$69,319,846.

The First National Bank of Jennings, the First National Bank of Welsh, the First National Bank of Lake Arthur and the Calcasieu Trust and Savings Bank of Lake Charles, all in Calcasieu parish, Louisiana, have consolidated under the name of the Calcasieu Trust and Savings Bank. The capital and surplus will be \$250,000 and business conducted at each of the points mentioned. Frank Roberts of Lake Charles is president.

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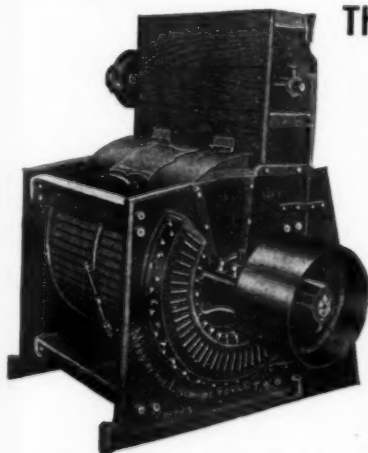
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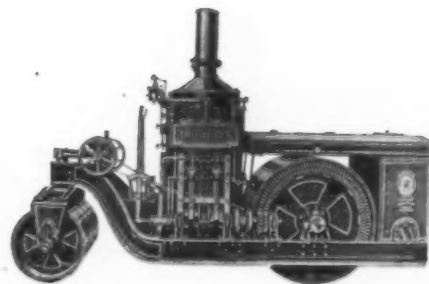
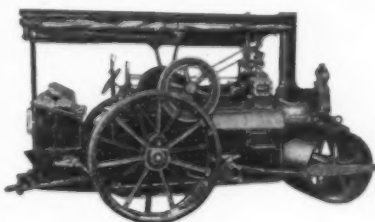
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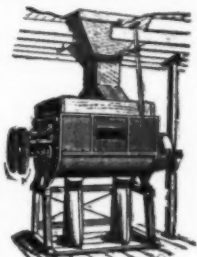
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"KEWANEE" UNION

Only Article Specified



"The Union with no inserted parts"

A representative recently called upon a foreman of a railroad shop in the Middle West, and on presenting the merits of the "KEWANEE" UNION was informed by the General Foreman that he was fully acquainted with the special advantages of the union. He said:

"When ordering unions I always specify the 'KEWANEE' UNION, and that is the only article I ever specify. When I order other goods (that is, valves, etc.) I simply specify the service for which they are required, and the Purchasing Department sends whatever they desire; but in the case of unions I do not want any union but the 'KEWANEE'."

The above case is typical; there are many other mechanical officials who do the same. They have become acquainted with the specific merits of the "KEWANEE" UNION, and are well aware that there is no other union having the good features possessed by the "KEWANEE" UNION. Among these good features may be mentioned the following:

(a) Brass to iron thread connection at the ring. Brass to iron will not rust together, and the joints can be disconnected and reconnected without injury. An iron to iron joint will rust together, thus unfitting it for further service.

(b) Brass to iron ball joint seat. A joint of two different metals (that is, a hard and a soft metal) is better than a joint made of two soft or two hard metals, as a brass to iron ball joint makes a tight seal without a gasket.

(c) The "KEWANEE" UNION consists of three solid parts only; there are no inserted parts to become loose by unequal expansion or contraction.

(d) When after years of service the "KEWANEE" UNION has earned the repose of the scrap pile, the brass end has a substantial scrap value.

(e) Every "KEWANEE" UNION is tested with 100 lbs. compressed air under water; the slightest leak shows on the water in the form of a bubble, and any defective union is scrapped. The practical value of this test is that every union sent out is perfect.

If you have tried the "KEWANEE" UNION, no words are necessary to convince you of the merits. If not, we will be glad to send literature and have you secure a sample lot through your regular source of supply.

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General Sales Offices: Frick Building, PITTSBURGH, PA.
DISTRICT SALES OFFICES IN THE LARGER CITIES
Export Representatives:—U. S. STEEL PRODUCTS EXPORT CO., New York City.

Classified Opportunities

AGENTS WANTED

WANTED—Well connected electric-power solicitor or superintendent of lines for electric plant to act as agent, on the side, for an electric-motor and dynamo-repair concern with good reputation for dependable repairs. Address No. 523, care Manufacturers' Record.

HELP WANTED

WANTED—Man who thoroughly understands ornamental wire and iron business to do estimating and selling for well-established concern. Address No. 528, care Manufacturers' Record.

SALESMEN WANTED

WANTED—A reliable salesman to sell fire bricks on commission. Columbia Brick & Plaster Co., North East, Md.

SITUATIONS WANTED

BY GRADUATE M. E. experienced designer, chief draftsman and superintendent, with firm who wants to build pumps, compressors and engines of new, economic design. Address No. 533, care Manufacturers' Record.

BUSINESS OPPORTUNITIES

GENERAL CONTRACTOR.—Indiana corporation owning \$25,000 planing mill and interior finish plant wants to combine with marble, cut stone, structural iron or fireproofing corporation for purpose of general contracting. Address No. 535, care Manufacturers' Record.

CASH FOR YOUR BUSINESS OR REAL ESTATE. No matter where located, if you want to buy, sell or exchange any kind of business or property anywhere at any price, address Frank P. Cleveland, Real Estate Expert, 276 Adams Express Building, Chicago, Ill.

FOR SALE—Part interest in prosperous store-fixture factory in Southern State; good reasons for selling and splendid opportunity for right party. Address No. 531, care Manufacturers' Record.

GLASS WORKS.—Additional capital, \$15,000 to \$20,000, needed to start up glass factory; idle some time owing to lack of funds for working capital. The plant, which is located in a growing town on main line of the Southern Railway in Northwest Georgia, is ready for operations, with practically no repairs necessary; capacity, carload of first-class flint bottles per day. Plant cost to erect and equip \$40,000. Refer to File No. 1744. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

ON A CAPITAL OF \$150, with some brains and hustle, an annual income of \$3000 and upwards can easily be made, only occupying part of your time; with small capital an unusual opportunity is offered to build up an independent business handling the Thurman Portable Electric Vacuum Cleaner. Write today for particulars. We also manufacture Portable Wagon House-to-House Cleaners. Gent. Compressed Air and Vacuum Machinery Co., 519-MR, North Taylor Ave., St. Louis, Mo.

I HAVE PATENTED a simple and inexpensive device for securing employees' working clothes in mills and shops, allowing free inspection and observation of same, resulting in minimum fire risk; no floor space required; lockers abolished. Correspondence solicited with those interested. Fred Thompson, U. S. N., Care Miss Lake, Warrenton, Va.

PATENTS.—Official copy "Patent Laws" United States sent on receipt ten cents in stamps. Hubert E. Peck Patent Attorney, 629 F St., Washington, D. C.

WATER-POWER

SMALL WATER-POWER FOR SALE, five miles from Cedartown, Ga., a live town of 6000 inhabitants and large mills; 500 H. P. can be developed and transmitted for \$50 per H. P.; no competing water-power. Address H. N. Snidger, Box 234, Anniston, Ala.

WATER-POWER.—Near Southern Railway's line in East Tennessee and close to a town of 600 people are water-powers which in the aggregate would probably develop several thousand horse-power. The region is good one for manufacturing in various lines. These powers are worth investigating. Refer to File No. 18,374. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

MINERAL SPRINGS

MINERAL SPRINGS.—Valuable springs property in East Tennessee, on line of Southern Railway, offers a good opportunity for a good man to build a resort hotel. The location is such that an excellent business can be established. Refer to File No. 10,576. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

HOTELS

THE NEW EXCHANGE HOTEL, situated on 3d and Franklin streets, near Union Depot, Waco, Texas, gives the best service for your money. Come and let me show you. It has just been completely remodeled and refurnished; has three large cool reception halls, new dining-room, electric fans and every provision for the comfort of its guests. One block from postoffice and business center of city. A. D. Adams, proprietor.

Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum space accepted, 24 lines. Allow seven words per line. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year, as follows: 100 lines, 18c. per line; 300 lines, 16c. per line; 500 lines or more, 15c. per line.

HOTEL FOR SALE

A MODERN substantial 45-room 3-story frame hotel, one block from Grand Central Depot, five minutes' walk from business center, Houston, Texas; water, electric lights, baths and modern conveniences; nearly new and in good repair. Rental, \$150 per month, three years' contract. Houston is one of the best hotel towns in the South. This is a fine rental and investment property, with promising speculative values attached, as the city is rapidly developing along that direction. Price \$25,000; might take part trade. Address W. S. Craig, Owner, Navasota, Tex.

HOTELS WANTED

HOTEL.—A university town of 10,000 to 12,000 people, in one of the most attractive, fertile and prosperous portions of the Piedmont country, presents a splendid opportunity for a high-class hotel man. The university enrolls yearly from 1000 to 2000 students, and in addition there are high-class preparatory and other schools. Through these institutions many visitors are attracted. It is also a town of many historic features, attracting travelers. The Blue Ridge mountains give the locality one of the most healthful climates. The neighborhood is filled with splendid country estates and is one of great social prominence. The combined attractions will make a modern, well-built and well-conducted hotel, run the year round, a good investment. A hotel man who can command some capital can secure local and other capital to build hotel. Present hotel facilities are insufficient. Refer to File No. 10,119. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

MARLIN, TEXAS, THE CARLSBAD OF AMERICA.—Excellent opportunity for experienced hotel people with capital to cater to high-class winter patronage. Our hot mineral water is richer than the Carlsbad water in the same properties that make that water famous. We have an established patronage all the year round of tourists and health seekers. Our water has an established reputation as a cure for rheumatism, stomach troubles and skin and blood diseases. We have first-class hotels, boarding-houses and bathhouses, all doing a fine business, but there is an opening for an exclusive winter hotel and sanitarium catering to Northern tourists. The supply of our present 3350-foot well is being used, and we are now sinking a similar well. Flow of present well, 180,000 gallons per day. Temperature of water, 147 degrees. Our attractive winter climate makes us the winter training place for the New York Giants. For information and literature address Marlin Commercial Club.

COTTON MILL WANTED

COTTON MILL.—Good town on Southern Railway in the eastern section of North Carolina offers good opportunity for the establishment of a cotton mill to cost at least \$200,000. One cotton mill already successfully established at this point. It is believed that at least one-fourth of the necessary capital can be raised locally. Refer to File No. 10,768. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

FOUNDRY WANTED

FOUNDRY OPENING.—Good opening for foundry in good town on Southern Railway, 40 miles from Danville, Virginia, where excellent market is afforded for its products and where fairly good labor can be secured at relatively cheap. Local people can be interested to subscribe stock in such an enterprise. Refer to File No. 11,176. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

FLOUR MILL WANTED

FLOUR MILL.—A location on branch line of the Southern Railway in Virginia, 25 miles from Richmond, in good wheat-growing section, offers excellent opportunity for flour mill. Local people could probably be induced to take financial interest in mill. Refer to File No. 11,186. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

DEPARTMENT STORE WANTED

DEPARTMENT STORE.—Town of about 6000 people, North Carolina, the center of the great Piedmont district, desires to interest someone in the establishment of a department store. There is no large store at that point. Town is located in a good mining, lumber and agricultural district, and is a good mill and foundry town, already supporting cotton, spinning and weaving mills, a foundry, machine shops, flour mills, large chair and furniture factories, etc. Refer to File No. 34,532. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

SANITARIUM WANTED

SANITARIUM.—A good opening for a well-equipped sanitarium will be found in a splendid Georgia town where there are springs and which is known as a health and pleasure resort. Refer to File No. 8367. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

TYPEWRITERS

TYPEWRITERS.—New, rebuilt and second-hand; all makes at lowest prices and guaranteed. Southern Typewriter & Supply Co., 229 West Fayette street, Baltimore, Md.

NO. 2 SMITH PREMIER and No. 6 Remington, push-button machines, rebuilt like new, \$45; overhauled Smiths and Remingtons in good order, \$35; No. 3 Oliverts, rebuilt, \$35 to \$45; Underwoods, rebuilt, \$45 to \$57.50. M. W. Lucy & Co., Typewriter Exchange, 225 W. Fayette St., Baltimore, Md.

REAL ESTATE

GENERAL

IF YOU WANT TO BID ON TEXAS School Lands, which can be had for \$2 to \$10 per acre, on forty years' time at 3 per cent. interest, or want to purchase or trade for property of any kind in the State of Texas, address The Stacy-Robbins Company, Austin, Texas. Refer to any bank in Austin.

70 ACRES on Dallas-Sherman Interurban, 16 miles north of Dallas. Two blocks of central business portion Plano, a town of 2000 inhabitants. High and beautiful; splendid two-story residence, large barn, all electric lighted; city water; cement and brick walks to all outbuildings, lots, walks and to town, to Interurban, Cotton Belt and Houston Texas Central depots. As home and farm in town it cannot be equaled. As a farm it will support the largest family and pay 10 per cent. additional on price asked, \$12,500. If subdivided into town property it will sell for three times this price. It will grow 100 bushels corn and bale cotton per acre. \$3000 cash and balance to suit. Be quick; this is a snap. For full particulars see or write L. H. Bomar, Dallas, Texas.

GREAT BARGAINS.—A sawmill plant, with 45,000,000 feet of pine, now in the hands of a receiver, can be had for one-third its value. Improved farms in Northern Louisiana, worth \$50 an acre, but the boll weevil has driven the owners into bankruptcy, can now be had for \$15 an acre. Inquire of D. E. Corbitt, Monroe, La.

TO SELL.—A 50x50-ft. brick ware and storage house; one 5-room dwelling, two lots, all on railroad track; one 17-room new and up-to-date house; two lots; two farms for sale. Write or see T. M. Tackitt, Weatherford, Okla.

FOR SALE.—Fine tracts of timber in Virginia and North Carolina from 1,000,000 to 40,000,000 feet. Farms from 50 to 1000 acres from \$1000 to \$15,000. Write me what you want. E. H. Hare, R. No. 2, Holland, Va.

FOR LEASE.—99 years, vacant corner, 50x100 feet, in the very heart of the business district of Houston, Texas, the most rapidly-growing city of the Southwest. Britton & Sam, Houston, Texas.

FOR SALE.—2600 acres; 1200 acres cultivated; residence, 35 tenant-houses, ginney, grist mill, cane mill; makes 450 to 500 bales cotton and corn to run the place; 31 mules; full farm equipment; this year's corn and feed crops included in price; good terms; \$52,500. 5000 acres, highly improved; depot on place; makes 500 bales cotton; \$75,000. 4000 acres; embraces townsites; everything new and good; rents for 150 bales cotton; \$80,000. 600 acres; splendid improvements; well located; good terms; \$12,000. 125 acres first-rate land; 40 acres cultivated; timber valuable; no waste; rents two bales cotton; \$750. Write for list of farms. G. H. Waddell, Americus, Ga.

TEXAS LANDS.—Texas figs are World's Fair winners. One acre set in figs and one town lot, \$239, payable \$10 down and \$10 per month, without interest; no payments when sick; clear warranty deed in case of death. Local market for fruit. Money back in four years, with annual income thereafter for life. If you want to enjoy life in South Texas under your own "vine and fig tree," or make a safe, profitable investment, write for particulars. Agents wanted. Orange groves sold on same terms. E. C. Robertson, 501 Klam Bldg., Houston, Texas.

TEXAS LAND.—65,000 acres fine land in Hidalgo county, Texas, 3 miles from county seat; railroads on two sides of it; in the great artesian belt. This is in the great sugar-cane and winter garden belt of Texas, and will be sold at a great snap, \$12.50 to \$15 per acre. Liberal terms will be given to purchaser. Call on or write the First National Bank, Hays City, Kans.

IF YOU WANT TO BUY ARKANSAS LAND, write S. C. Dowell, Walnut Ridge, Ark., who owns and controls thousands of acres of the finest farming and timbered lands in the State at the lowest prices.

MINERAL AND TIMBER LANDS

FINEST yellow-pine properties of today, on Kansas City, Mexico & Orient Ry., in Mexico; 90,000 acres, \$1.50 gold per acre, 1/2 cash, balance 1 and 2 years at 7%; 18,000 at \$2, 1/2 cash, balance 1 and 2 years at 7%. Enough railroad ties contracted for to liquidate deferred payments. Address Trommlitz Brokerage Co., Galveston, Texas.

FOR SALE.—13,867 acres fine hardwood on railway; stumpage only is offered at \$8.50 per acre; will cut 50,000,000 mostly white oak; located in Tennessee. 9000 acres, Tennessee, on railway; will cut 50,000,000 mostly white oak; good roads. Price for quick sale, \$135,000. Write for complete information. W. P. Allen, Box 358, Sharon, Tennessee.

12 MILLION FEET PINE TIMBER, 2 to 4 miles from transportation, in Bladen county, N. C.; logging conditions good; freight rate low; about one-third of it long-leaf pine and worked for turpentine 2 years; covers 1150 acres of land; is a fine body of timber and no doubt will be bought by the first party who investigates. Price \$20,000. R. E. Prince, Raleigh, N. C.

FOR SALE.—Good investments mining and industrial properties, also mineral and timbered lands. Write for information. W. Fairley & Co., 922 Empire Bldg., Birmingham, Ala.

I HAVE 10,000,000 feet standing timber; 1,000,000 pine, balance gum and oak; begins one mile railroad; logging good; 30 years to remove timber; \$8500 cash to quick buyer. If you don't mean business, don't write. W. A. Joyner, Branchville, Va.

TIMBER TRACT.—3200 acres of virgin timber in Mississippi, 5 1/2 miles from the Webb branch of the Southern Railway; use of tram or timber tracks, one running out near the tract on the east, and the other about two miles to the north, can be arranged for, or new tram can be built at a small cost. Timber estimated to cut 10,000,000 feet oak, 12,000,000 feet gum, 4,000,000 feet hickory, 4,000,000 feet cypress and ash, as well as quantity of miscellaneous timbers. The cut-over lands will make fine farms, as the soil is a black loam, with no overflow on property. Price for timber alone, \$26.50 per acre; for land and timber, \$32.50 per acre; one-fourth to one-third cash; balance on easy terms at 6 per cent. Refer to File No. 25,069. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

FOR SALE.—Southern timber lands. I have some bargains. Correspondence solicited only with bona-fide buyers. Address David Funsten, Staunton, Va.

3000 ACRES.—Asphalt rock, finest material for roadbuilding; coal, timber, iron and limestone, all on same land; very accessible by water and railroad; price upon application. Nicol & Hansell, Box M. R., Manassas, Va.

35,000,000 FEET standing pine, cypress, gum, ash and oak timber for sale on and near A. C. L. R. and Tar River. Address J. R. Davenport, Pactolus, N. C.

FOR SALE.—400,000,000 virgin yellow pine, West Florida; also best 72,000-acre pine and cypress tract in State. Whispell & Irwin, Jacksonville, Fla.

MICA MINE.—Large deposits of mica of superior size and quality, with mine already opened and ready to operate, together with 100 acres of land, in Amelia county, Virginia, two miles from Southern Railway; about 60 acres cleared; balance in mixed oak, pine, poplar and hickory timbers; property is watered by two large springs and running streams. Has nine-room frame dwelling, some small buildings, good well in yard, and about four acres of assorted fruits. Railroad can be reached by tramroad or about one mile siding. Price of mica mine, \$12,000 cash. Refer to File No. 3179. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

COAL MINES

FOR SALE.—Coal mine in Central Illinois, on Chicago & Alton Railroad; fully equipped and in good condition; capacity 1000 tons per day; 1000 acres of coal in fee or lease. Address C. Cooper, Nilwood, Ill., or L. W. Cline, Litchfield, Ill.

FOR SALE.—Some West Virginia coal mines and coal lands; cheap and desirable properties. Write for particulars. David Funsten, Staunton, Va.

COAL LANDS

FINANCE ME AND I'LL MAKE YOU rich. I want to equip 1400 acres, two veins domestic 4 1/2 feet, steam 4 feet, no partings, the frontage to 3000 acres; \$22,500 will do it, and you will own one-half of a property we can sell for \$150,000. No brokers nor commission men. J. M. Ross, Somerset, Ky.

GYPSUM ROCK

GYPSUM ROCK FOR SALE.—M. J. Skivington of Mumford, N. Y., has eight feet of gypsum rock; analysis, 94 to 96.7; one mile from four railroads. Call and see the cores.

IRON ORE LANDS

IRON-ORE LANDS.—Large deposits of titaniferous iron ore in Guilford and Rockingham counties, North Carolina. Refer to File No. 1238. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

Classified Opportunities

FARMS AND TRUCK LANDS

IN FAMOUS PEE DEE SECTION, SOUTH CAROLINA. Improved farm and truck lands for sale; reasonable terms; splendid trucking country; shipping facilities unsurpassed; purchase money can be cleared first year's profits. **James D. Evans, Atty., Florence, S. C.**

WILL EXCHANGE 35 acres good land, 6 acres bearing orange grove, located in Dade county, Florida, for farm of merit in either Virginia, West Virginia, Maryland or Pennsylvania. **W. A. Aman, Daytona Beach, Fla.**

FOR SALE—\$25,000—Magnificent 400-acre farm in Monroe county, Tenn., on Little Tennessee River and L. & N. R. R., 30 miles south of Knoxville; one-half mile of railroad station; 55 acres fine river bottom; 100 acres, oak timber; balance fine upland; beautiful, healthy location; fine water; excellent orchard apples, peach, pecan and grape; new 8-room residence; six 2-room tenant-houses; barn, crib and warehouse; \$1000 worth farm implements, one horse, four mules; \$15,000 cash; balance on easy terms. Apply **C. M. Niles, Vonnore, Tenn.**

FOR SALE—545-acre farm, 2 miles east of Llano, joining Llano Fair Grounds; well fenced; plenty water; river front with pecan bottom; 3 earth and 1 cypress tank; windmill and gasoline engine; about 55 acres under cultivation; more can be cultivated; good 7-room 2-story house with cellar; large cistern; hydrants all over the place; barn and out-houses; splendid place for dairy, truck garden or an ideal summer home; price \$11,000. For further particulars write **Box 43, Llano, Llano county, Texas.**

VIRGINIA COUNTRY HOMES.—We make a specialty of handling country estates in Virginia, and have some beautiful places along the James and York rivers. One handsome place with fine brick mansion over 200 years old is offered at a low price. The river views are magnificent. Send 10 cents in stamps for literature and other information. **F. H. Ball, General Manager, Box R, Williamsburg, Va.**

N. C. FARMS FOR SALE.—From 10 to 10,000 acres, adapted to the growing of almost any kind of crop. Some very nice places from 400 to 600 acres. The crops now in them will prove it. Ask for list. State your wants. **R. E. Prince, Raleigh, N. C.**

A RARE CHANCE to get a home and enjoy life in the famous Rio Grande Valley, the winter garden of the world, where flowers, fruit and vegetables grow winter and summer; 10, 20, 25, 50 and 100 acre tracts of the finest fruit, truck and grape land at from \$25 to \$50 per acre; fine climate; plenty of water; good transportation facilities. For particulars address **Citrus Fruit Development Co., Brownsville, Texas.**

FARM AND TIMBER LANDS

TEXAS LANDS.—Farm, ranch and truck; large tracts for investments; colonization rapidly absorbing large acreage; thousands seeking comparatively cheap Texas lands for future homes. Trucking, near ready market, solves vital question with many having small capital; easy payments. **Warner & Company, Austin, Texas.**

FACTORY SITES

FOR SALE.—A good factory site in a fine location near the city of Chattanooga, Tennessee; there are two steam engines, one gas engine, good boiler and several smaller machines, pulleys and shafting; there are also three good buildings and three choice lots with a railroad track running through property. Machines and buildings are worth the price asked. Address **Hall Bros., Chattanooga, Tennessee.**

FACTORIES WANTED

BUFORD, GEORGIA. 37 miles northeast of Atlanta, on Southern R. R., population 3000, wants cotton mill; shirt, overall and pants factory; brick plant, laundry, bakery, furniture factory, etc. The best location South for wagon and buggy manufacturing, as we have abundance of the best of oak and hickory timber. Also have cheap electric power; fine free school, two banks and churches for everybody. All inquiries answered by Secretary of Board of Trade, Box 212, Buford, Ga.

QUANAH, railroad center of Northwest Texas, wants a packing-house and small manufacturing industries; four railroads; immense distributing territory; metropolis of rapidly-growing country. **Quanah Chamber of Commerce, Quanah, Texas.**

OPPORTUNITIES FOR MANUFACTURERS and others at the great water-power town of Marble Falls, Burnet county, Texas, are unsurpassed. The wonder natural water-power of the Colorado river, known as Marble Falls, is now being augmented by an immense dam sixty-five feet high, where power will be supplied to manufacturing enterprises, and where the raw material can be had from the cotton fields, sheep and cattle ranches, the native woods, the largest granite quarry in the world and other quarries of building and monumental stone and various sources of supply for the different lines of manufacture. The large stone cotton-mill building, already completed, can be had by the man who will equip, operate and maintain it, on terms most liberal. Good railroad facilities giving short connections with the largest cities in Texas. **Business Men's Association, Marble Falls, Texas.**

SHOE FACTORY.—One of the largest and most progressive cities in the South, a railroad center, good distributing point, with large wholesale trade, particularly desiring to secure a shoe manufacturer to locate in their town. Three vacant buildings at present available, any one of which can be secured for factory purposes upon a very satisfactory basis. Local capital might be interested to co-operate in the establishment of a shoe factory at this point. Refer to **File No. 18,593, M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.**

CISCO, TEXAS.—Cisco will offer good inducements to any and all kinds enterprises—creamery, broom-corn factory, cotton mill. Cisco is located at the junction of the Texas & Pacific and Texas Central railroads, and has ten passenger trains daily; splendid shipping facilities. From 20,000 to 30,000 bales of cotton marketed in Cisco annually. For further information write to **Richard H. McCarty, Secretary Com. Club.**

MARTINSBURG, W. VA.; Shenandoah Valley; 100 miles to Baltimore, 80 miles to coal regions; cheap gas, coal, labor and freight rates; on main line B. & O., also on Pennsylvania Railroad; offers exceptional facilities to factories; undeveloped resources require capital; prolific fruit and agricultural soil, unequalled climate; liberal and progressive municipal government. For further particulars address **Board of Trade.**

BARREL AND CRATE FACTORY.—Good opening for a barrel and crate factory in South Carolina town on main line of the Southern Railway to Savannah. Citizens will co-operate in the establishment of such a plant. Refer to **File No. 11,178, M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.**

ARE YOU INTERESTED in securing location for industrial enterprises, such as electric-light plants, ice factories, broom factory, planing mills, overall factories, etc.? If so, address **Homer D. Wade, Secretary Central West Texas Association Commercial Clubs, Stamford, Texas.**

CANNING PLANT.—Good East Tennessee community desires a cannery. The farm lands in the tributary country raise a sufficient amount of products for the successful operation of such a plant. Refer to **File No. 29,231, M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.**

THIRTY COMMERCIAL CLUBS WILL mail pamphlets and information on the fastest developing territory in the Great Southwest. Splendid business openings, manufacturing and distributing opportunities. Agriculture, fruit and truck growing, stock raising, poultry and dairy pursuits offer unrivalled opportunities. Address Secretary N. W. Texas and S. W. Oklahoma Association of Commercial Clubs, Wichita Falls, Texas.

ABILENE, TEXAS, wants a cotton mill; inexhaustible supply of pure water; steam coal at \$1.50 per ton; splendid shipping facilities; near the geographical center of the State; one-quarter million bales of cotton produced within a radius of 45 miles of the city last year. Address **Abilene 25,000 Club, Box 637.**

COTTON MILLS WANTED BY LAWTON, metropolis of Southern Oklahoma, special inducements offered for cotton mills, factories and wholesale houses of all kinds. Lawton is in the cotton belt, far from cotton mills and jobbing centers; ideal climatic conditions; vast tributary country; abundance of best quality of pure mountain water; natural distributing point; eight years old; 10,000 people; capital of Comanche county. Lawton has nine different U. S. Government institutions, each enlarging; five diverging railroads; more building. For special information write **Secretary of Chamber of Commerce, Lawton, Okla.**

EGG-CASE FACTORY.—A town in Virginia, 130 miles south of Washington, in a fine poultry district, now shipping eggs, is a splendid point for a factory making egg cases. It is estimated that one station consumes 10,000 to 15,000 cases annually, and other towns in the neighborhood will take up to 100,000. Water-power in the vicinity can be secured at a nominal figure. Refer to **File No. 11,182, M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.**

FACTORY SITES

INDUSTRIAL LOCATIONS.—A new industrial city in the great Birmingham district of Alabama offers unusual advantages and conditions for prospective companies and firms looking for locations. Refer to **File No. 10,272, M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.**

INDUSTRIAL PLANTS

FOR SALE OR LEASE.—To competent, practical and reliable parties, a fully-equipped brick plant with a capacity of 40,000 per day. Write for full particulars. **W. H. Moore, Valley Planing Mill Co., Hot Springs, Ark.**

FOR SALE.—An old-established retail lumber yard and planing mill on railroad in Newbern, Tenn., doing good business. Reason for selling, have other business out West. **J. R. Cole Lumber Co., Newbern, Tenn.**

FOR SALE.—Sawmill plant, complete; 37½ acres of land, houses, dollyways, sawmill, planer, etc.; capacity, 25,000 feet daily; 25,000,000 feet pine timber tributary to mill. For particulars address **J. L. Tryon, Houston, Texas.**

FOR SALE.—Very desirable sawmill property on A. C. L. at Castle Hayne, 8 miles from Wilmington, N. C. Property consists of 17½ acres of land, 12 small tenements, sawmill, two drykilns, practically ready to run. Mill located on North East Branch of Cape Fear River; A. C. L. tracks in yard; suitable for sawmill or barrel-head factory; plenty of S. C. pine and gum logs can be brought on river and tributaries. Would sell as a whole or would remove sawmill machinery, drykilns, engine and boilers and sell site and tenement-houses. **Chadbourne Sash, Door & Lumber Co., Wilmington, N. C.**

WOODWORKING PLANT

WOODWORKING PLANT.—Woodworking plant, which cost about \$6000; machinery new; used only eight months and of latest improved make; building is 40x80 feet; 69-100 of an acre of ground in the property lies between tracks of two railways; in town of 20,000 people in North Carolina. Plant was built for the manufacture of novelties from hardwood, and is up to date in every respect; machinery will turn out showcases, mantels, chairs, etc. Company will sell entire plant, or will reorganize, selling an interest to party who will take management. Refer to **File No. 11,190, M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.**

VENEER PLANT

VENEER PLANT.—Veneer plant, well located for successful operation, in North Carolina, well equipped, near timber and in good labor district, built at a cost of \$45,000, is for sale or lease. The plant has been idle the past twelve months on account of depression in business. No one connected with the company owning plant with proper experience to operate it and handle the business. It will be sold for \$30,000 or leased for \$4000 per annum. Refer to **File No. 6906, M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.**

SPOKE AND BENDING PLANT

SPOKE AND BENDING PLANT.—On the Harrisonburg branch of the Southern Railway, in Virginia, in a town of about 600 people, a spoke and bending plant is for sale. Frame mill building, with metal roof, 100x150 feet; shed 250 feet long; also large stock yard. Mill contains all kinds of spoke and bending machines, a log mill, two engines and one boiler; saws of all kinds. Two to three thousand acres of timber lands can be secured in connection with this plant. Refer to **File No. 4863, M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.**

SLATE QUARRY

SLATE QUARRY.—Slate quarry, 38 miles from Knoxville, Tennessee, with all mineral rights to 405 acres of land, of which 100 acres are bottom land and 305 mountain land. Best quality of slate of even texture and works easily; vein estimated to be about 400 feet in width. Quarry can be easily worked and slate loaded directly on cars with very little expense. Price \$35,000. Refer to **File No. 21,318, M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.**

SOUTHERN CITIES

TUPELO, MISSISSIPPI, offers exceptional opportunities for a corn mill, supply store, tile plant, shirt and overall factory (denim and shirting made here), alfalfa mill, etc. Also want wholesale notion and dry-goods house, brick plant. Tradesmen and artisans will find many trades not represented in this progressive city. Local interest in worthy enterprises. Has two lines of railway, Frisco and Mobile & Ohio; new road surveyed and bonds voted for it. Wholesale trade now million annually. Large territory to draw from. Best diversified farming country in Miss. Whites in majority. Farmers now ship alfalfa, poultry, stock. Lands reasonable. Good schools, neighbors and water. If you are looking for a location, investigate Tupelo. Get book of facts. Tupelo is in northeast Mississippi. Unexcelled climate. Address **Secretary Business Club, Tupelo, Miss.**

SOUTHWEST TEXAS offers its best opportunities in the Rio Grande Valley. Special information of manufacturing, commercial and agricultural openings. **Industrial League, Box 129, Eagle Pass, Texas.** "The healthiest city in the country."

"TAMPA IS THE TOWN TO TIE TO." Gateway to Gulf; nearest important American port to Panama canal; doubling population every four years; 100 per cent. city of South; big opportunities for investor, manufacturer, homeseeker; tourists' paradise. For literature address **W. B. Powell, Secretary Board of Trade, Tampa, Fla.**

LEEDS, ALABAMA, on the main lines of the Southern and Illinois Central Railroads, 18 miles from Birmingham, the most rapidly developing town in Alabama. Write for particulars. **Alabama Real Estate & Investment Co., C. D. Gilliam, President, Suite 224-5-6 Brown-Marx, Birmingham, Ala.**

POLE CYPRESS

FOR SALE.—Two sections fine pole cypress, close to railroad, in Southeast Missouri Drainage District. **Jo A. Parker, Parma, Missouri.**

MACHINERY AND EQUIPMENT

WANTED.—If you are interested in pumps of latest and best styles, send to us for book and catalogues. Pumps of all styles and for all uses. The Columbus Steam Pump Works, West Broad street, Columbus, Ohio.

FOR SALE.—Peerless brick machine and family ice-maker, or will trade for gasoline engine or blacksmith tools. Address **Box 224, Greensboro, N. C.**

ONE 35 H. P. first-class boiler and engine; one Lane sawmill, complete. For full particulars apply to **G. C. Wright, Executor of Estate of Aug. Wright, Petersburg, Va.**

FIVE PORTABLE CIRCULAR-SAW MILLS for sale; complete with all saws, cars, etc., just as we are running them; range from 20 H. P. Frick to 35 H. P. Wheeland. **W. M. Ritter Lumber Co., Franklin, N. C.**

PATENT ATTORNEYS

PATENT YOUR IDEAS.—\$100,000 offered for one invention, \$50,000 for another; book, "How to Obtain a Patent" and "What to Invent," sent free; send rough sketch for free report as to patentability; patent obtained or fee returned. We advertise your patent for sale at our expense. **Chandler & Chandler, patent attorneys, 978 F street, Washington, D. C.**

PATENTS Secured or Fee Returned. Send sketch for free report as to patentability. Guide book and what to invent, with valuable list of inventions wanted, sent free; \$1,000,000 offered for one invention; \$16,000 for others. Patents secured by us advertised free in *World's Progress*; sample free. **Victor J. Evans & Co., Washington, D. C.**

PATENTS THAT PROTECT.—Our three books for inventors mailed on receipt of 5c. stamps. **R. S. & A. B. Lacey, Dept. 14, Washington, D. C. Estab. 1869.**

GEO. E. TEW, Patent Lawyer, Washington, D. C. Personal attention to every case. Baltimore associate, **J. B. Simpson, Mech. Eng., 641 Calvert Bldg.,** inventions developed. Drawings prepared.

INCORPORATING COMPANIES

DO YOU wish to incorporate your business or proposition, need money, need corporate advice? Do you need a prospectus which properly explains the merits of your scheme? We can probably meet your demands. Write us. **Southern Finance Co., 907 Bank of Commerce Bldg., Norfolk, Va.**

FINANCIAL AND INDUSTRIAL

CAPITAL, FURNISHED to manufacturers; large loans negotiated. **Hillyer Investment Co., Atlanta, Ga.**

ARKANSAS 6% BONDS.—School bonds, drainage bonds, special improvement district bonds and levee bonds, under present favorable laws, are a safe and choice investment. Write for information. Address **State Investment & Trust Co., Little Rock, Ark.**

FOR SALE.—\$100,000 in first mortgage notes, bearing 6% interest. We own these notes and desire some reliable broker to assist us in handling them or making a liberal loan. These notes are on Memphis residence property, advancing in value, and bring in \$1200 per month, or \$24,000 per year with 6% interest. **Tennessee Real Estate & Investment Co., Memphis, Tenn.**

MILTON LAND & INVESTMENT CO., Marianna, Fla., receives deposits, makes collections and deals in stocks, bonds and real estate. Write for full information.

BANK WANTED

LOCATION FOR BANK.—A small town in Southern Virginia, in a prosperous portion of its county, and with a large territory tributary to it, has no bank. A small one can be run there to advantage. Refer to **File No. 2321, M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.**

BANKS

COMMERCIAL STATE BANK, Birmingham, Ala. State depository. Prompt attention to Alabama collections.

THE PALMETTO NATIONAL BANK, Columbia, S. C., capital \$250,000, solicits accounts of banks, firms, corporations and individuals either commercial or savings accounts.

BANK OF ENSLEY, Ensley, Ala., capital \$100,000, surplus and profits \$50,000. Individual responsibility more than a million dollars. Collections made promptly.

PROPOSALS

PUBLIC BUILDINGS.

CONSTRUCTION BONDS.

MISCELLANEOUS.

GOVERNMENT PROPOSALS

TREASURY DEPARTMENT. Office of the Supervising Architect, Washington, D. C., October 25, 1909. Sealed proposals will be received at this office until 3 o'clock P. M. on the 24 day of December, 1909, and then opened, for the construction (including plumbing, gaspiping, heating apparatus, electric conduits and wiring) of an extension, remodeling, etc., to the U. S. Postoffice at New Brunswick, New Jersey, in accordance with the drawings and specification, copies of which may be obtained from the Custodian at New Brunswick, N. J., or at this office, at the discretion of the Supervising Architect. **JAMES KNOX TAYLOR**, Supervising Architect.

POSTOFFICE DEPARTMENT. Washington, D. C., Oct. 16, 1909. Sealed proposals will be received at the office of the Purchasing Agent of this Department until 2 o'clock P. M. Nov. 10, 1909, for furnishing special envelopes for the various executive departments of the Government during the period beginning Dec. 1, 1909, and ending June 30, 1911. Advertisement dated Oct. 1, 1909, has been canceled. Blanks for proposals, with specifications and instructions to bidders, will be furnished upon application to the Purchasing Agent for the Postoffice Department, Washington, D. C. **JOSEPH STEWART**, Acting Postmaster General.

NEW BOND OFFERINGS

\$20,000 Street Improvement Bonds

For Sale—Twenty thousand dollars street-improvement bonds town of Hendersonville, N. C. Detailed information upon application. Address Secretary Board of Commissioners, Hendersonville, N. C.

Permanent Improvement Road Bonds

Bids will be received by the Board of Supervisors of Greenville County, Virginia, until twelve o'clock noon November 15, 1909, for eighty thousand dollars (\$80,000) five (5) per cent. permanent improvement road bonds.

Address inquiries and bids to W. R. Cato, agent, care of E. Peyton Turner, clerk Board of Supervisors, Emporia, Virginia.
By order of the Board.
W. R. CATO, Agent.

\$150,000 4½% Bonds

State of Alabama, Autauga County Board of Revenue, Prattville, Ala. Notice is hereby given that the Board of Revenue of Autauga County, Alabama, invites sealed bids on the following bonds of said county: \$55,000.00 of Courthouse Building Debt Bonds, \$20,000.00 of Jail Building Debt Bonds and \$75,000.00 of Public Road Bonds. Bidders will file their bids with G. S. Livingston, Probate Judge, at Prattville, Ala., on or before noon of the 15th day of November, 1909. Said bonds are to mature thirty (30) years from date of issue and bear interest at the rate of 4½ (four and one-half) per centum per annum, payable semi-annually. Bidders are requested to bid for all or any portion of said bonds. All bids are required to be secured by a properly certified check of \$500.00.

The bonds will be sold to the highest bidder. The Board of Revenue reserves the right to reject any and all bids.

Dated at Prattville, Ala., October 18, 1909.
Board of Revenue, Autauga County, Ala.
By **G. S. LIVINGSTON**,
Probate Judge.

\$10,000 School Bonds

Sealed bids will be received by the Town Council of Linden, Alabama, until 12 o'clock noon November 22, 1909, for ten \$1000 Coupon School Bonds, dated July 1, 1909, bearing interest at five per cent., payable semi-annually on the first day of January and July, at National Park Bank, New York city.

Bids should be addressed to the undersigned, accompanied by certified check for \$500 as a guarantee of good faith. The Council reserves the right to reject any and all bids.

For further information address
JNO. E. HECKER, Mayor,
Linden, Alabama.

Bids Wanted for \$50,000 City of New Bern, North Carolina, Bonds—Interest 5%

The city of New Bern, North Carolina, requests bids for fifty thousand dollars (\$50,000) par value five per cent. (5%) thirty-year coupon bonds, interest payable semi-annually, to be issued for the purpose of paving streets.

Sealed bids will be accepted for the same up to the night of December 7, 1909, and the same will be opened at the meeting of the Board of Aldermen that night.

Each bid must be accompanied by certified check for two hundred and fifty (\$250) dollars as guarantee of entering the contract according to the terms of the bid if accepted. The city reserves the right to reject all bids.

F. T. PATTERSON,
City Clerk.

\$14,000 5% Water-Works, School and Street Improvement Bonds.

Bids will be received at the Mayor's office in the town of Panama City, Florida, until Wednesday, November 10, 1909, for the purchase of fourteen thousand dollars of Panama City water-works, school and street-improvement bonds, running for a period of fifteen years, with interest at five per cent. per annum, payable semi-annually in the town of Panama City, Fla. The right is reserved to reject any and all bids. Address inquiries and bids to
R. L. MCKENZIE, Mayor,
Panama City, Florida.

PUBLIC BUILDING

Municipal Building and Auditorium

The Municipal Building Commission of Raleigh, N. C., invites proposals for the erection of a Municipal Building and Auditorium. Bond required, 30 per cent. of amount of contract. Certified check in the sum of 3 per cent. of amount of proposal

must accompany same. Proposals will be received up to 3.30 P. M. December 1, 1909, at the rooms of the Chamber of Commerce, Raleigh, N. C., sealed proposals to be directed to Chas. E. Johnson, chairman Municipal Building Commission, Raleigh, N. C. Copies of plans and specifications may be seen at the office of the Mayor, at the office of Messrs. Barrett & Thompson and at the Chamber of Commerce, Raleigh, N. C., and the office of P. Thornton Mayre, Atlanta, Ga. Copies of plans and specifications may be secured by application to P. Thornton Mayre, architect, 913 Candler Building, Atlanta, Ga., upon payment of \$5.
CHAS. E. JOHNSON, Chmn.;
H. W. JACKSON, Secy.;
JOS. G. BROWN,
JOSEPHUS DANIELS,
JNO. C. DREWRY,
Municipal Building Commission.

Courthouse

NOTICE TO CONTRACTORS.

Dallas, N. C., October 9, 1909.
Sealed proposals are invited by the Board of County Commissioners of Gaston County for the erection and completion of a new county courthouse and county jail on the county's property in Gastonia, N. C., agreeable to plans and specifications prepared by Architects Milburn, Helster & Co., Washington, D. C. Plans are on file with the Register of Deeds at Dallas, at the architects' office, and at the City Hall, Gastonia, N. C. Each bid must be accompanied by a certified check on some well-known bank, made payable to John F. Leeper, Chairman, in the sum of \$1000, as evidence, if their bid is accepted, that they will enter into contract at once and give an acceptable guarantee company's bond in the sum of 50 per cent. of the contract price for the faithful performance of the contract. Each bid must be sealed and addressed to the Register of Deeds at Dallas, N. C., and marked plainly "Bid for County Courthouse," and must be filed on or before eleven o'clock A. M. November 16, 1909. The Commissioners reserve the right to reject any or all bids.

JOHN F. LEEPER,
Chairman Board of County Commissioners.
A. J. SMITH,
Register of Deeds.

MISCELLANEOUS

Building Material

Simons-Mayrant Company, General Contractors, want estimates for Structural and Ornamental Steel and Iron, Fireproofing, Ornamental Terra-cotta, Plastering, Painting, Heating, Plumbing, Electric Work, Roofing, Sheet-metal Work, Exterior and Interior Marble Work, and all other items entering into the construction of the eight-story office building to be erected at Charleston, S. C., in accordance with plans and specifications by Thomson & Froling, 114 East 28th St., New York city.

Address
SIMONS-MAYRANT COMPANY,
16 Broad St., Charleston, S. C.

Reinforced Concrete Viaduct

Sealed bids will be received by the Board of Public Works at the office of the chairman, Knoxville, Tenn., for the building of a reinforced concrete viaduct over Second

Creek and the tracks of the L. & N. and Southern railways on Asylum avenue; length 1100 feet; width 40 feet. Said bids will be opened at the office of the chairman Tuesday, November 3, 10 A. M. **W. B. Crenshaw & Co.**, engineers. The right is reserved to reject any and all bids.

JOHN W. FLENNIKEN,
Chairman.

Furnishing Courthouse

The Commissioners' Court of Harris County, Texas, will contract with the furniture manufacturers at Houston, Texas, on December 1, 1909, with reference to the furnishing of Harris County Courthouse, now under construction, and will investigate any bids or proposals submitted at that time. Usual rights reserved. Blueprints may be had from Lang & Witchell, architects, Dallas, Texas.

A. E. AMERMAN, County Judge.

Concrete Sidewalks, Gutters, Driveways, Granite Curbing, Cast-Iron Drain Pipe

Paducah, Ky., October 30, 1909.
The Board of Public Works will receive bids until 3.30 P. M. Tuesday, November 23, 1909, on approximately as follows:
96,500 square feet Concrete Sidewalks.
17,620 linear feet Granite Curbing.
17,620 linear feet Concrete Gutter.
7,250 square feet Concrete Driveways.
1,700 linear feet Cast-Iron Drain Pipe.
Work to be commenced as early in the spring of 1910 as weather will permit and completed on or before October 1, 1910. Certified check for \$250, construction and maintenance bonds required. Plans, specifications, etc., on file at City Engineer's office.
L. A. WASHINGTON,
City Engineer.

Road Construction

NOTICE TO CONTRACTORS.

Sealed bids will be received at the office of the Sullivan County Road Commission in Bristol, Tennessee, up to one o'clock P. M. Monday, November 15, 1909, for grading and macadamizing of about thirty miles of roads in Sullivan county, Tennessee.

Bids will be received for the work as a whole and for grading, masonry, bridging, tiling and other work attendant upon making a graded road, under one head, and the macadamizing under a separate head.

The roads to be built will be laid off in sections and bids will be received as above for separate sections.

Profiles and specifications can be seen in the office of the County Engineer in Bristol, Tennessee.

The right to reject any and all bids for the whole or the parts aforesaid of said roads is reserved. Certified check for two per cent. of aggregate bid will be required from all bidders.

October 15, 1909.
JOHN H. CALDWELL,
JOHN W. SWADLEY,
JOHN G. PRESTON,
Commissioners.

F. G. PHILLIPS,
Engineer.

Special Advertisements of General Interest

INDUCEMENTS TO INDUSTRIES

Alabama is the richest State in the Union in raw materials and undeveloped resources. These materials and resources practically cover every field of human want and all branches of productive industry. The possibilities for development in this territory are boundless, especially in the line of diverse manufacturing. We wish to correspond with practical parties who desire to engage in any line of manufacturing. Substantial inducements offered to those with capital and experience to locate in this territory.

For further particulars and information address

The Eden Development Company

2113 1st Avenue, BIRMINGHAM, ALA.

FOR SALE

150 Million Feet

Louisiana red cypress, accessible to rail and water. One of the few choice tracts left in Louisiana.

Fifteen million feet Louisiana red cypress, convenient to rail and water. If interested, write us promptly.

BARNEY & HINES

MEMPHIS, TENN.

Furniture Factory for Sale

Very complete plant. Machines and Buildings in good condition. Location on R. R. at Brenham, Texas, near Houston. A bargain. Will accept part cash. Address
GIDDINGS STONE, Brenham, Texas

FOR SALE

Modern, up-to-date stove plant, or control of same, in the most progressive of Southern cities. Railway frontage. Nine trunk lines for distributing output. Raw material at your doors. Address

"BUSINESS,"
Care Manufacturers' Record.

\$300,000

is the amount necessary to buy one of the best coal properties ever put on the market.

\$100,000

will buy one of the most beautiful and splendidly improved country homes in Virginia.

If interested write for prospectus and photographic views.

H. W. HILLEARY & CO.

Charlottesville, Va.

NOTICE TO METAL BUYERS

We are in position to fill orders for different grades of Scrap Metal used by Brass Founders, Metal Makers, etc., such as Babbitt Metal, Composition Red Brass, Yellow Brass, Brass or Copper Borings, Turnings, Clippings, Aluminum Metals, etc. We also purchase Scrap Metals of all grades.

H. KANDER & CO., Bowling Green, Ohio.

STOVE PATTERNS FOR SALE

Complete line of modern cookstove patterns. Putting in molding machines, and prefer making new patterns to changing old. Bargain for quick sale. Address

"PROMPT,"
Care Manufacturers' Record.

What J. T. KIMBROUGH & CO. has done within the last three years

First located the Gulf Refining Co. at an expenditure of \$100,000; the Germofert Fertilizer Manufacturing Co., investment of \$200,000; the Huitt Brass & Manufacturing Co. of Chicago, \$40,000; Empire Printing & Box Co., at \$150,000 expenditure; the Wood Preserving Manufacturing Co. and Union Box & Lumber Co., at \$75,000; the Binder Picture Frame Co., at \$40,000. And this Company has this month sold to the Georgia Realty Co. a manufacturing location on the Central & Southern Railroad at a price of \$106,000.

If you wish to locate in or around Atlanta, communicate with

J. T. KIMBROUGH & CO.,
408-9 Century Bldg., Georgia.

Atlanta, P. S.—Also located this year the J. I. Case Threshing Machine Co. on Whitehall street.

3000 Acres West Virginia Timber and Coal Lands for Sale

Near Rogers' new railroad. Timber estimate is 15,000,000 ft. hemlock, 5,000,000 ft. poplar, 4,000,000 ft. white oak, 2,000,000 ft. chestnut, etc. This timber is old growth, 2 to 5 ft. in diameter, of a quality equal to the best in that district. There are also four veins of coal above Creek level, three of which are over 4 ft. in thickness. Other veins below. The property lies in the New River District.

For sale by
W. B. BLAKEMORE,
141 Milk St., Boston, Mass.

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